

# BEHAVIORAL HEALTH IN WEST VIRGINIA

The West Virginia Bureau for Behavioral Health mission is to improve the quality of life for West Virginians with behavioral health needs. This document is used to describe patterns of substance use, related consequences and mental health issues within West Virginia.

*A State  
Epidemiological  
Profile  
May 2012*

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Rocco S. Fucillo, Cabinet Secretary

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## Executive Summary

### Overview

The West Virginia Department of Health and Human Resources, Bureau for Behavioral Health and Health Facilities (BBHBF), Division on Alcoholism and Drug Abuse is the designated Single State Authority (SSA) for substance abuse prevention and treatment activities in the state. The BBHBF administers the Substance Abuse Prevention and Treatment and Community Mental Health Block Grant Plan and Report that funds comprehensive behavioral health prevention, promotion, early intervention, treatment, and recovery programs statewide. The BBHBF is located within a broader organization, the Department of Health and Human Resources, which also includes the state Public Health, Medicaid and Child Welfare agencies, among others.

The Bureau for Behavioral Health and Health Facilities is the designated host agency for the State Epidemiological Outcomes Workgroup (SEOW) project funded by the Substance Abuse and Mental Health Services Administration (SAMHSA). The West Virginia SEOW was assembled to lead the statewide systematic process to gather, review, analyze, translate and disseminate information about substance use and abuse and mental health in West Virginia. The SEOW structure provides a systematic process for planning, implementation, and monitoring, which provides ongoing core support to meet specified deliverables in the SEOW RFP. The BBHBF provides key leadership to the SEOW with a Project Manager, Epidemiologist, Research Specialist, and support from the Division of Data and Technology. Membership of the SEOW is wide and varied. Organizational representatives were selected on the basis of recognized data competence and interest in alcohol, tobacco, drugs, and mental health epidemiology. The overall mission of the SEOW is to provide leadership for behavioral health data and transfer competency development at state and community levels in order to impact state substance abuse and mental health policy development.

The West Virginia State Epidemiological Profile (Epi Profile) was developed based upon available data on substance use and its related outcomes. This profile is intended to serve as a dynamic document, which will be continually edited and updated. The profile is intended to be used by a variety of stakeholders and audiences as a single source to obtain the most up-to-date information related to substance use and abuse. There are many uses of the Epi Profile based on one's need.

Some uses of the profile may include:

- Applying for grant funds
- Surveillance
- Prevention Planning
- Legislative Decisions
- Education

Overall, the purpose of the profile is to provide a single source for individuals to obtain information about substance use and its consequences that will allow West Virginia to make decisions based on existing evidence and the demonstration of need. Having the ability to track the needs of communities through epidemiological factors will allow more effective allocation of resources to address the problem of substance abuse using evidence-based programs.

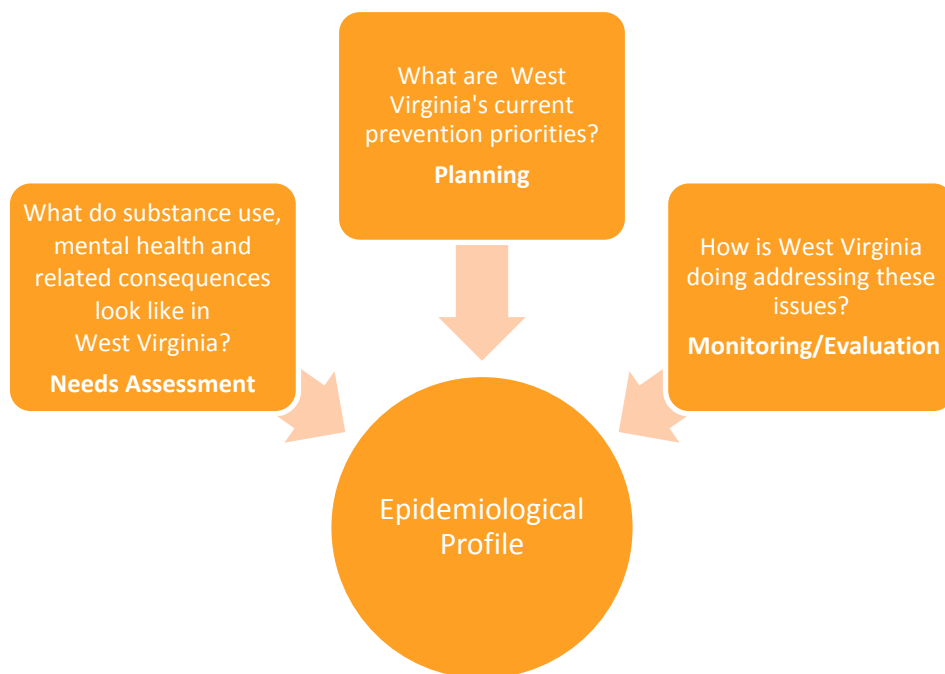
The promotion of positive mental health and the prevention of substance abuse and mental illness have been key parts of SAMSHA's mission to reduce the impact of substance abuse and mental illness on America's communities. The Epi Profile is considered a dynamic document which will be continually edited and updated based on available data.

The constructs represented in the Epi Profile include:

- Consumption Data-Information on alcohol, tobacco, and drug use
- Consequence Data-Negative outcomes associated with alcohol, tobacco, and drugs
- Risk and Protective Factor Data-factors influencing use
- Mental Health Data

## Profile Overview and Format

The Epi Profile is made up of a variety of data sources related to substance consumption, related consequences, risk and protective factors, and mental health indicators. This document is formatted with these constructs in mind. This kind of epidemiological analysis and summary forms the basis for a state monitoring system for substance abuse prevention efforts. Such efforts can help inform stakeholders what substance use, mental health, and related consequences look like in West Virginia (Needs Assessment), what West Virginia's current prevention priorities are (Planning), and how West Virginia is doing to address these issues (Monitoring/Evaluation).



## Data Descriptions

Each section of the profile contains statewide data that describes a particular behavioral health construct: alcohol, tobacco, drugs, and mental health, from a variety of sources. Within each of the constructs, the profile uses indicators that assess and measure the construct. These indicators are grouped into the:

- Use and high risk use of the substance
- Chief consequences
- Factors that influence the consumption

The mental health construct is listed separately in the profile because there is no consumption of mental health, rather just indicators. The Data Description at the beginning of each section includes a brief overview of the indicator, source of the data, and a section summary.

## Methodology

This profile was developed using a number of data sources. A summary of the sources used is provided in the Data Sources section of the profile. When deciding on sources to use in this profile, it was determined that a set of standards should be applied to each data source used in the profile. West Virginia followed the same methodology supplied as technical assistance from SAMSHA. Each inclusion criterion is defined below:

- **Availability**-The data should be readily available and accessible. The measure must be available in disaggregated form at the state level.
- **Validity**-The measure must meet basic criteria for validity. That is, there must be research based evidence that the indicator accurately measures the specific construct and yields a true snapshot of the phenomenon at the time of assessment.
- **Consistency**-The method or means of collecting and organizing data should be relatively unchanged over time. Alternately, if the method of measurement has changed, data should exist that determine and allow adjustment for differences resulting from data collection changes.
- **Timing**-The measure should be available for the past three to five years, on annual basis. This enables the state to track trends.
- **Sensitivity**-The measure must be able to detect change over time that might be associated with changes in alcohol, tobacco, or drug use.

## Population Summary

West Virginia is noted for its mountains and diverse topography. West Virginia is a state in the Appalachian and Southeastern regions of the United States, bordered by Virginia to the southeast, Kentucky to the southwest, Ohio to the northwest, Pennsylvania to the northeast and Maryland to the east. West Virginia is part of the Appalachian region: a 205,000 square-mile region that follows the spine of the Appalachian Mountains from southern New York to northern Mississippi. Approximately 42% of the population in the Appalachian region is rural, compared to 20% of the national population. Eighty percent of West Virginia is forested with over 110,000 square miles of hardwood forest, wind-swept mountains and photo-perfect valley landscapes. The state covers 24,078 square miles, with a 2010 estimated population of 1,852,944 people. Over 44% of the population in West Virginia lives in a rural area where families are often isolated from services provided in larger, more populated areas.

West Virginia is comprised of 55 counties, with the state capitol being in Charleston, West Virginia. Even the population centers in West Virginia are small in comparison with other states. The state's largest city is Charleston (population 51,400), which is home to the state Capitol and is the only city in West Virginia with a population that exceeds 50,000. Other large cities include Huntington (49,138), Parkersburg (31,492), and Morgantown (29,660).

The composition of West Virginia's population reflects a low ethnic diversity. According to the 2010 US Census Bureau, 93.9% of the population is White. Approximately 79.1% of the population is 18 years of age or older; with the median age in West Virginia being 41.3. Males make up 49.3 % of the population and 50.7 % is female. The US Census Bureau reported an increase of only 1.2% of the White population (1,765,642) from 2000 to 2010, compared to a 31.5% increase in the Asian population (12,406) and a 10.3% increase in the population of Black or African Americans (76,945). According to the US Census Bureau, 1.2% of the population in West Virginia is Hispanic or Latino (22,268); however this population increased by 81.4% from 2000 to 2010.

West Virginia is an economically disadvantaged state, with one of the lowest median household incomes in the United States. In 2010, the US Department of Agriculture (USDA) estimated the median household income is \$37,423 compared to \$50,221 nationwide. According to the USDA, West Virginia's poverty rate is the 5<sup>th</sup> highest in the nation; with almost 18% of the population living in poverty. It is estimated that in 2009, 17.8% of the population in West Virginia lived in poverty compared to 14.3% nationwide. In 2010, the US Census Bureau estimated approximately 73.4% of the housing tenure was owner occupied with the average household size being 2.43 people. Sixty-three percent of families with a female head of

household (no husband present) with related children less than 5 years of age have an income below the poverty level compared to 45.6% for the US. West Virginia's annual average unemployment rate was 9.1% in 2010, the highest average annual rate for the state since 1993. According to the US Census Bureau, West Virginia ranked last in labor force participation, with only 66.3% of eligible residents 16 to 64 years actually working. West Virginia also ranks last in the nation for the percent of people 25 years and over who have completed a bachelor's degree according to the US Census Bureau. In 2005-2009, 82% of West Virginian's 25 years and over had at least graduated from high school and 17% had a bachelor's degree or higher compared to the US average of 27.2%. Eighteen percent of students in West Virginia were dropouts, meaning they were not enrolled in school and had not graduated from high school. The American Psychological Association has shown that education has a direct impact on a person's socioeconomic wellbeing. According to the United Health Foundation's Health Rankings, which evaluates health determinants by state, West Virginia ranks 43<sup>rd</sup> in 2010; down from 42<sup>nd</sup> in 2009. Challenges described in the United Health Rankings report included the state's high prevalence of smoking and the high rate of preventable hospitalizations in West Virginia.

The Appalachian Regional Commission was established in the mid-1960s by Congress to bring almost 400 counties in Appalachia into the mainstream of American economy. This legislation was created to address the persistent poverty and growing economic despair of the federally designated Appalachian Region. West Virginia is the only state in the nation that is entirely within the borders of the Appalachian Region. According to the Appalachian Regional Commission, West Virginia is the 2<sup>nd</sup> most rural state in the nation and was once highly dependent on mining, heavy industry and agriculture but is now becoming increasingly reliant on jobs in the service industry, retail and government.

Living in a rural state has disadvantages. The educational and employment opportunities are scarce in rural areas compared to urban areas, and people in rural areas have more difficulties accessing health services, transportation services and other resources. The lack of opportunities affects the population of West Virginia as younger educated residents move to the cities where there are more opportunities. An existing culture of strong work ethics and strong family values has been replaced with a sense of hopelessness and helplessness due to the poverty that results from isolation and lack of employment. That hopelessness results in mental and substance abuse disorders that now prevail in all sectors of West Virginia's communities.

Living in a rural state also has its advantages too. West Virginia is conducive to family life. Residents in West Virginia appreciate a hometown friendly atmosphere, relaxed pace and a five-minute rush hour. West Virginians enjoy a low cost of living, lower property taxes, and an

average home price that is 64% below the national average according to the West Virginia Department of Commerce.

Understanding the uniqueness of West Virginia and rural Appalachian culture is fundamental to planning and implementing a successful statewide system of behavioral health care. To fully understand Appalachia, it is important to recognize the cultural diversity within West Virginia.

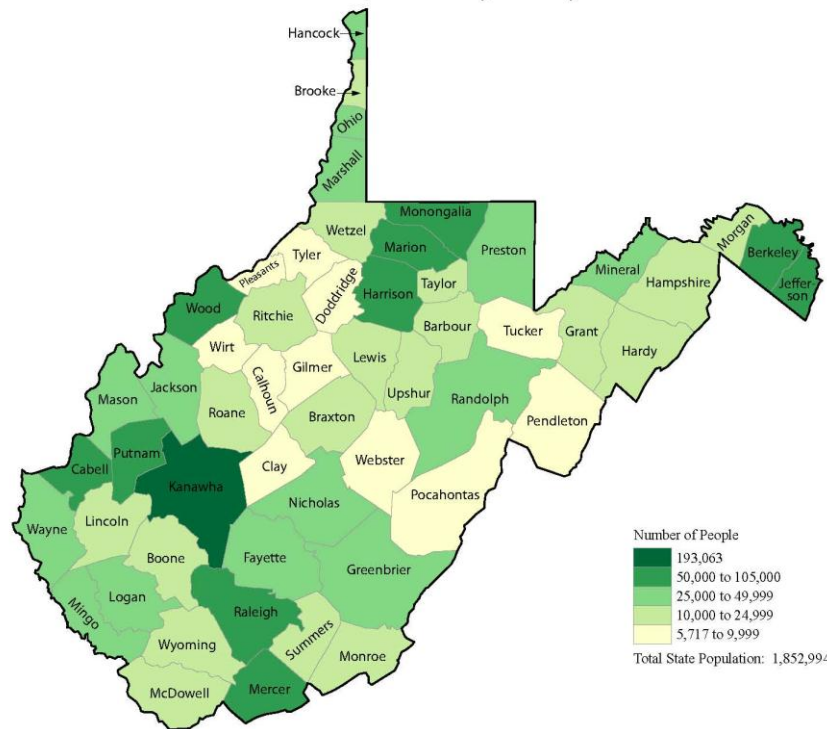
This culture is comprised of four distinctive groups of people:

- 1)** Descendants of the original pioneers who settled in the region during the westward movement. These people tend to be landowners, politicians, and business people. The characteristic traits of this group are self-reliance, independence, hardworking, stable, and strong family ties.
- 2)** A second group is composed of the hard working coal miner, logger, or factory worker. The average worker has limited education, few skills, a large family, no wealth, and few choices of vocation. While, for example, coal mining continues to be the largest financial contributor to the economy of West Virginia, poverty in the coalfields remains a daily and a depressing reality.
- 3)** The third group is the professional group. These are individuals and their families who have moved to Appalachia due to their profession (i.e. bankers, lawyers, teachers, ministers, etc.). Members of this group are usually not readily accepted by the Appalachians.
- 4)** The fourth group includes returning Appalachians. This group consists of individuals who grew up in the mountains, moved away for employment, and are now returning to Appalachia. Many of them find it difficult to adjust to the lifestyle they left as a teenager.

Traditional West Virginian values of family solidarity, self-reliance, and pride have held families together in the face of overwhelming problems. The behavioral health system in West Virginia seeks to speak to this cultural trait and to address the stigma related to seeking behavioral health services so families can stay in their communities and receive the services they need from people they know and trust.

## WEST VIRGINIA - 2010 Census Results

### Total Population by County



Source: U.S. Census Bureau, 2010 Census Redistricting Data Summary File  
For more information visit [www.census.gov](http://www.census.gov)

United States  
**Census**  
Bureau

## Summary of Key Findings

### Consumption of Substances

- On average, adults in West Virginia reported a lower rate of binge drinking than the national average 2006-2010.
- West Virginia's rate of adults who reported that they "drink heavy" is below the national average.
- From 1993-2009, students in West Virginia grades 9 through 12 reported a higher rate of binge drinking than the national average rate of drinking.
- In 2010, West Virginia had the highest percentage of adults smoking cigarettes in the US.
- West Virginia ranked the 5<sup>th</sup> highest state in the nation for youth who reported smokeless tobacco use in 2009.
- West Virginia ranked the 8<sup>th</sup> highest state in the nation for youth who reported current cigarette use in 2009.
- In 2009, women in West Virginia who are pregnant report a higher incidence of smoking at 28.9% than the general population as a whole at 25.6%.
- Although West Virginian youth have reported a steady decline of marijuana use since 1999, the prevalence of marijuana use is considerably higher than the national average.
- West Virginia has the highest annual per capita number of retail prescription drugs filled at pharmacies nationwide.
- Young adults in West Virginia aged 18 to 25 years had the highest prevalence of "nonmedical use" and "pain relievers" in 2007-08.
- West Virginia students grades 9 through 12 reporting ever using heroin on one or more times during their life is almost double that of the national average.
- The West Virginia Prescription Drug Abuse Quitline reported in 2010 that 73% of the calls they received were for abuse of Opioids.

### Consequences Resulting from Substance Use and Abuse

- In 2009, the rate of alcohol overdose deaths in West Virginia had increased to 4 deaths per 100,000 individuals.
- In 2009, alcohol was a factor in 40% of fatal motor vehicle accidents in West Virginia.

- The rate of adults arrested for driving under the influence (DUI) in 2010 was 33.6 per 10,000 individuals.
- West Virginia's death rate from lung, bronchus, and trachea cancer has remained steady since 2001 and is significantly higher than the US average rate.
- Opiates are the number one cause of death associated with drug overdoses in West Virginia.
- From 2001 to 2010, West Virginia had a 214% increase in the number of prescription drug overdoses in the state.
- The West Virginia Poison Control received over 500 reports in 2010 related to Opioid exposures compared to 115 reports for cocaine, heroin, methamphetamines, and marijuana combined.

## Factors Contributing to Substance Use and Abuse

- Over 45% of female students grades 9 through 12 who reported drinking in West Virginia obtained alcohol they drank by someone giving it to them.
- Persons 18 to 25 years in West Virginia have the lowest perceived risk of having five or more drinks of an alcoholic beverage once or twice a week compared to any other age group.
- Almost 40% of West Virginia's underage youth who smoke reported obtaining cigarettes by giving money to someone else to purchase as the most prevalent means of obtaining cigarettes.
- West Virginia females have a greater perceived risk from smoking cigarettes compared to males in all high school grade levels.
- West Virginians aged 18 to 24 years of age reported the lowest perception of risk associated with smoking marijuana once a month compared to any other age group.
- In 2010, the top sources identified from the Prescription Drug Hotline of where callers obtained their prescription drugs included: buying from the streets, stealing from family or friends, or given by family or friends.

## Behavioral Health

- Over 14% of West Virginians in 2006 reported having at least one serious psychological distress episode within the past year.

- Over 10% of students grades 9 through 12 reported attempting to commit suicide within the past 12 months.
- Youth in West Virginia reported one of the highest suicide attempt rates in the nation at nearly 11% in 2009.
- West Virginia's suicide rate in 2010 15.6 per 100,000 population, which was well above the national average in 2007 at 11.5 per 100,000 population.
- Overall, students in West Virginia reporting feeling sad or hopeless have been consistent with the national averages. However, male students grades 9 through 12 in West Virginia reported a disproportionately higher rate of feeling sad or hopeless when compared to the national average.
- In 2010, approximately 25.1% of the sheltered homeless population in West Virginia reported mental illness and/or substance use.
- In 2010, almost 30% of survivors identified that substance abuse was a contributing factor to their abuse.

## Disclaimer

As described previously, there are multiple purposes for this profile as well as multiple data sources. One purpose is to provide a snapshot of the most up-to-date data available regarding substance abuse and mental health issues in West Virginia, while another purpose is to look at trends over time. The authors of this profile have presented an array of data, which will be annually reviewed and updated as new data becomes available. We acknowledge that not all data is presented in the Epi profile, and we encourage the use of additional data that may not be represented. Data can be presented in a variety of ways, as displayed in this profile; we suggest you consult with an epidemiologist if you require assistance interpreting the data. Although every effort has been made to ensure the accuracy of the data and information presented in this profile, errors and conditions originating from physical sources used to develop the profile may be reflected in the data supplied. While the data being provided has been produced and processed from sources believed to be reliable, the Bureau for Behavioral Health and Health Facilities shall not be held liable for any errors in this data.

## Alcohol Consumption

### Current Use

**Indicator Description:** Current consumption of alcoholic beverages, such as beer, wine, whiskey, brandy, and mixed drinks is defined as at least one drink in the past 30 days. In order to assess the patterns of substance use and abuse in West Virginia we must determine if alcohol is currently being consumed.

**Why Indicator is Important:** Alcohol use is very common in the United States. Drinking alcohol has an immediate effect on a person's health and can increase the risk of many harmful health conditions and social issues.

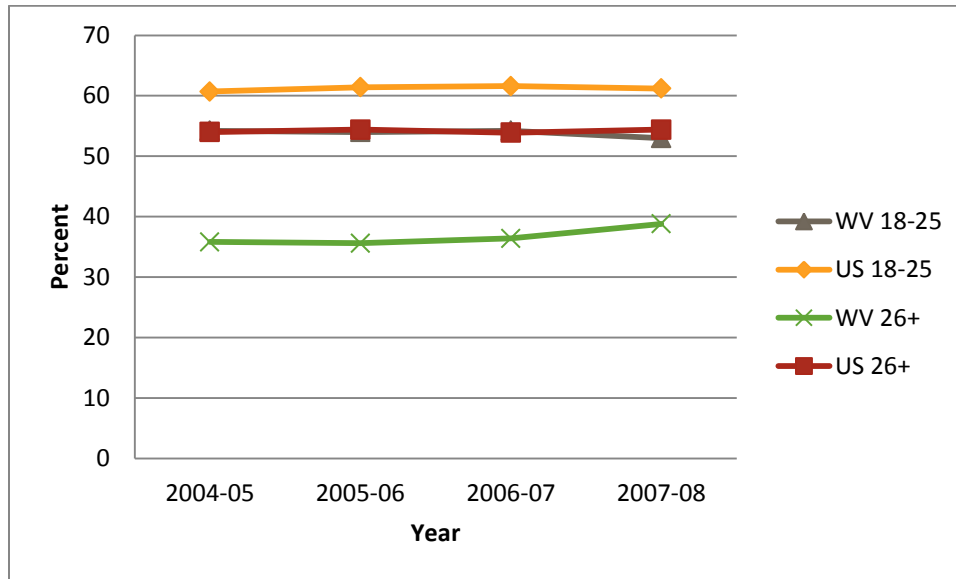
**Key Highlights:**

- From 2004-2008, West Virginians reported a lower rate of alcohol consumption within the past 30 days compared to the US average.
- In a youth national survey, West Virginia students grades 9 through 12 reported an equal rate of alcohol consumption within the past 30 days compared the US average.
- In 2010, the percentage of West Virginians reporting alcohol consumption within the past 30 days was almost half that of the national average.

**Substance: Alcohol**

**Data Source: NSDUH**

**Individuals Reporting Any Use of Alcohol within the Past 30 Days**



West Virginia	2004-05	2005-06	2006-07	2007-08
Ages 12 thru 17	16.1%	16.6%	15.9%	13.9%
Ages 18 thru 25	54.2%	54.0%	54.2%	53.0%
Ages 26 and over	35.8%	35.6%	36.4%	38.8%
Total current alcohol use (%)	36.3%	36.2%	36.7%	38.2%
United States	2004-05	2005-06	2006-07	2007-08
Ages 12 thru 17	17.1%	16.6%	16.3%	15.3%
Ages 18 thru 25	60.7%	61.4%	61.6%	61.2%
Ages 26 and over	54.0%	54.4%	53.9%	54.4%
Total current alcohol use (%)	51.1%	51.4%	51.0%	51.4%
WV:US*	.71	.70	.71	.74

Note: Estimates are based on a survey-weighted hierarchical Bayes estimation approach.

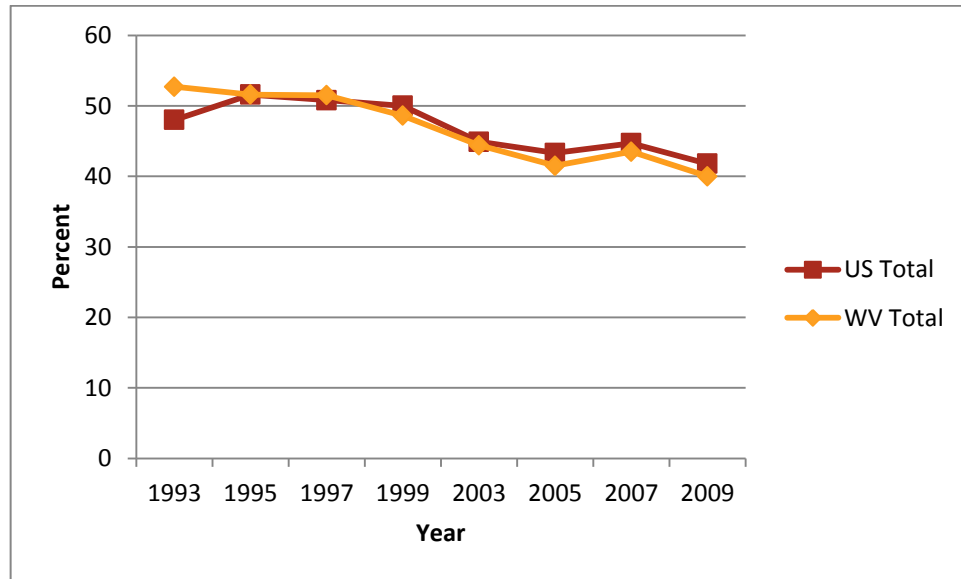
Percentages are presented for the 2 years combined.

\*Ratio of WV relative to US; a score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates

**Substance: Alcohol**

**Data Source: YRBSS**

**Students Grades 9 through 12 Reporting Any Use of Alcohol within the Past 30 Days**



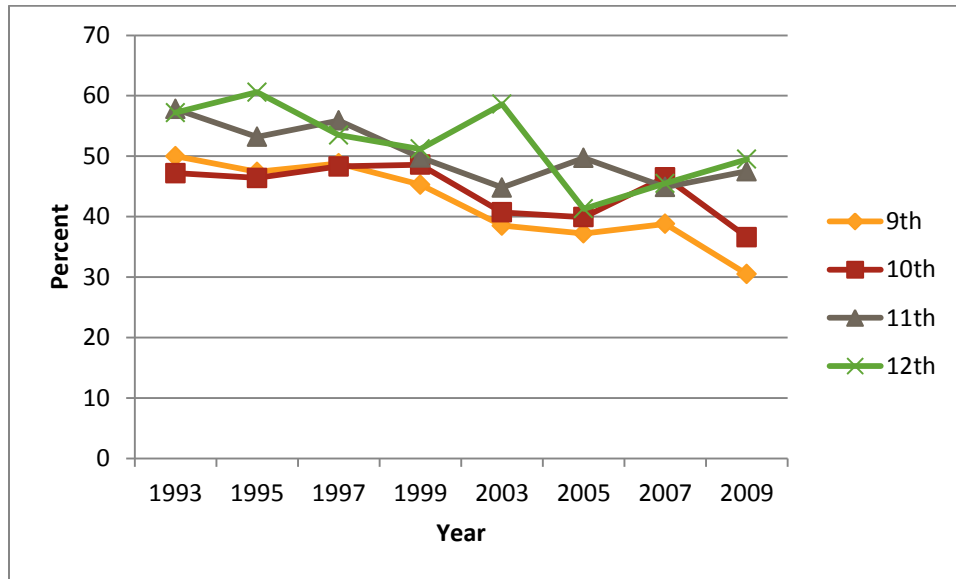
West Virginia	1993	1995	1997	1999	2003	2005	2007	2009
<b>Total</b>	52.7%	51.6%	51.5%	48.6%	44.4%	41.5%	43.5%	40.0%
<b>Female</b>	49.4%	45.6%	44.6%	46.9%	45.6%	37.5%	42.1%	40.2%
<b>Male</b>	56.0%	57.3%	58.9%	50.2%	43.3%	45.3%	44.8%	40.5%
United States	1993	1995	1997	1999	2003	2005	2007	2009
<b>Total</b>	48.0%	51.6%	50.8%	50.0%	44.9%	43.3%	44.7%	41.8%
<b>Female</b>	45.9%	49.9%	47.8%	47.7%	45.8%	42.8%	44.6%	42.9%
<b>Male</b>	50.1%	53.2%	53.3%	52.3%	43.8%	43.8%	44.7%	40.8%
<b>WV:US*</b>	<b>1.1</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>

\*Ratio of WV relative to US; a score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates

**Substance: Alcohol**

**Data Source: YRBSS**

**Students Grades 9 through 12 Reporting Any Use of Alcohol within the Past 30 Days by Grade**

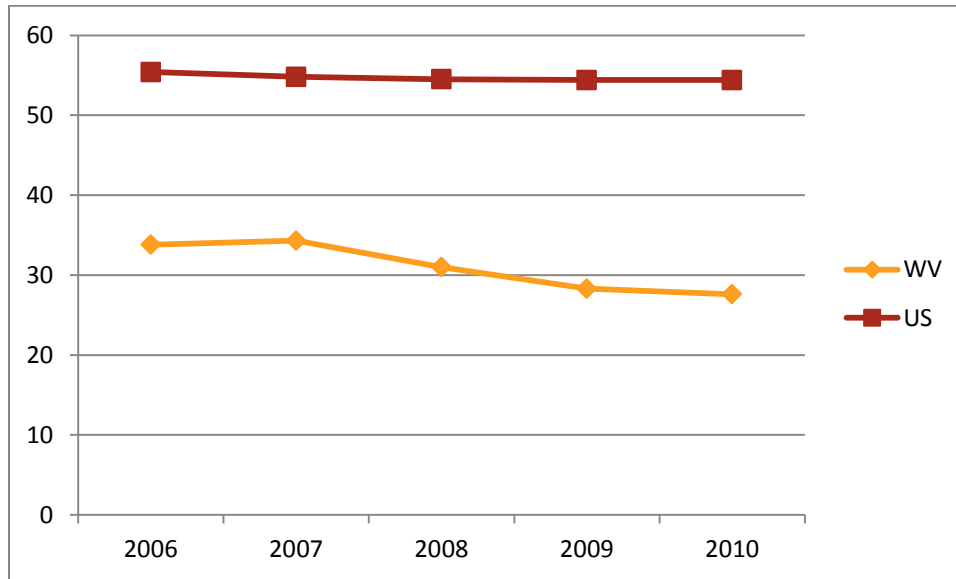


West Virginia	1993	1995	1997	1999	2003	2005	2007	2009
9 <sup>th</sup>	50.0%	47.4%	48.8%	45.3%	38.5%	37.2%	38.8%	30.5%
10 <sup>th</sup>	47.2%	46.4%	48.3%	48.6%	40.7%	39.9%	46.5%	36.6%
11 <sup>th</sup>	57.8%	53.2%	55.9%	49.8%	44.8%	49.7%	44.9%	47.5%
12 <sup>th</sup>	57.2%	60.6%	53.5%	51.2%	58.6%	41.3%	45.5%	49.5%

**Substance: Alcohol**

**Data Source: BRFSS**

**Adults Reporting Any Use of Alcohol within the Past 30 Days**



	West Virginia	United States	WV:US*
2006	33.8%	55.4%	0.6
2007	34.3%	54.8%	0.6
2008	31.0%	54.5%	0.6
2009	28.3%	54.4%	0.5
2010	27.6%	54.4%	0.5

*\*Ratio of WV relative to US; a score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates*

	2006	2007	2008	2009	2010
<b>Gender</b>					
Male	42.6%	43.9%	39.6%	35.6%	35.5%
Female	25.6%	25.4%	23.0%	21.4%	20.2%
<b>Age</b>					
18-24	40.7%	42.4%	33.1%	34.2%	34.2%
25-34	42.1%	49.3%	40.2%	36.0%	36.5%
35-44	44.7%	39.6%	35.8%	34.5%	32.3%
45-54	36.7%	35.5%	35.1%	32.1%	31.3%
55-64	28.4%	28.7%	26.4%	25.0%	24.0%
65+	15.6%	16.7%	18.4%	13.0%	13.2%

## Binge Drinking

**Indicator Description:** Binge drinking is defined as a pattern of alcohol consumption that brings the blood alcohol concentration (BAC) level to 0.08% or more. This pattern of drinking usually corresponds to 5 or more drinks on a single occasion for men or 4 or more drinks on a single occasion for women, generally within about 2 hours. According to national surveys, approximately 92% of US adults who drink excessively report binge drinking in the past 30 days. Binge drinkers are 14 times more likely to report alcohol-impaired driving than non-binge drinkers.

**Why Indicator is Important:** Binge drinking is associated with many health problems including: unintentional injuries, alcohol poisoning, sexually transmitted diseases, unintended pregnancy, children born with fetal alcohol spectrum disorders, liver damage, and more.

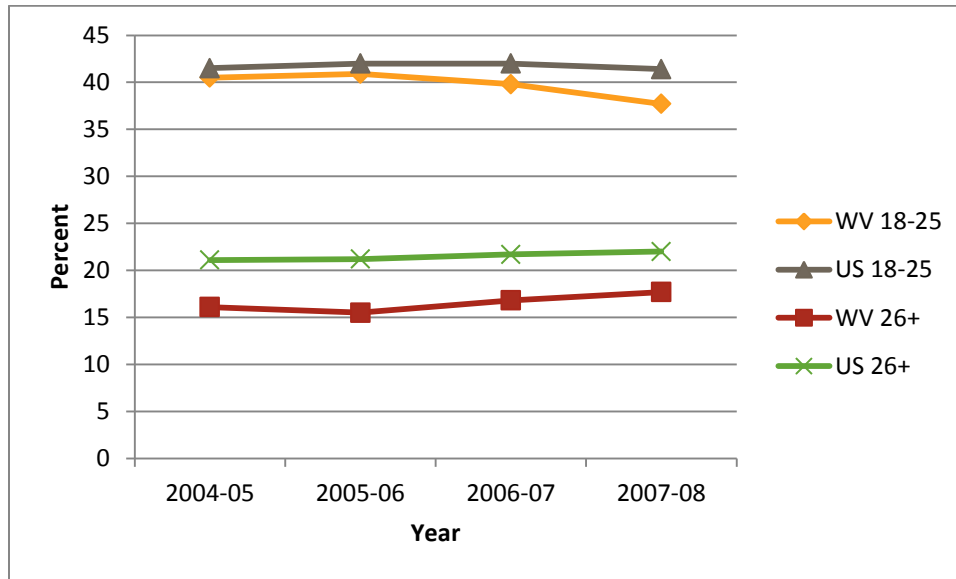
**Key Highlights:**

- On average, students in West Virginia grades 9 through 12 reported a higher rate of binge drinking than the national average rate of binge drinking from 1993-2009.
- In 2010, 18.2% of West Virginians ages 18-24 reported having 5 or more drinks on at least one occasion within the past 30 days.
- In West Virginia, males reported binge drinking almost four times more than females.

**Substance: Alcohol**

**Data Source: NSDUH**

**Individuals Reporting Binge Drinking in the Past 30 Days**



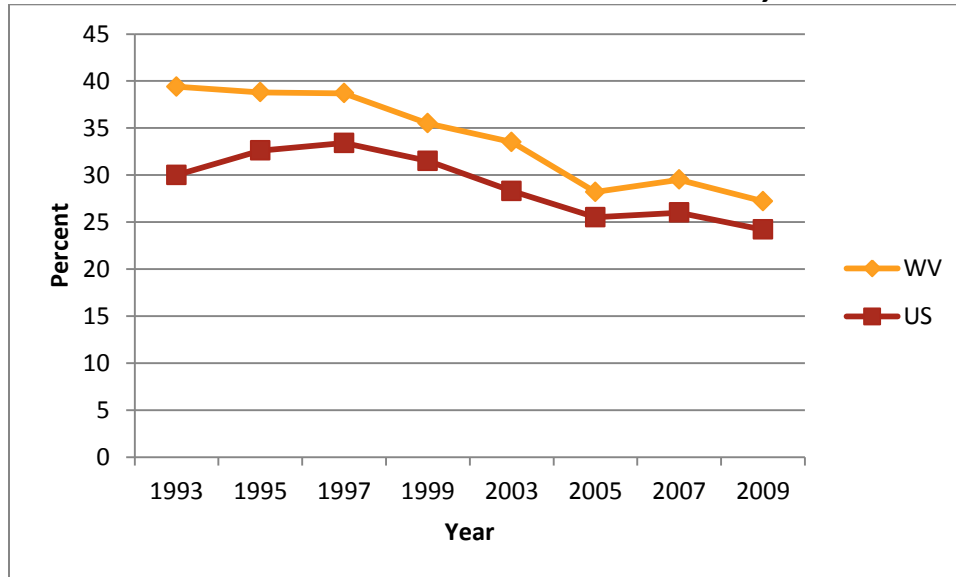
West Virginia	2004-05	2005-06	2006-07	2007-08
Ages 12 thru 17	10.8%	10.0%	9.2%	8.9%
Ages 18 thru 25	40.5%	40.9%	39.8%	37.7%
Ages 26 and over	16.1%	15.5%	16.8%	17.7%
Total current alcohol use (%)	18.7%	18.9%	18.8%	19.3%
United States	2004-05	2005-06	2006-07	2007-08
Ages 12 thru 17	10.5%	10.1%	10.0%	9.3%
Ages 18 thru 25	41.5%	42.0%	42.0%	41.4%
Ages 26 and over	21.1%	21.2%	21.7%	22.0%
Total current alcohol use (%)	22.7%	22.8%	23.2%	23.3%
WV:US*	0.8	0.8	0.8	0.8

Note: Estimates are based on a survey-weighted hierarchical Bayes estimation approach; Percentages are presented for the 2 years combined. NSDUH defines Binge Alcohol Use as drinking five or more drinks on the same occasion on at least 1 day in the past 30 days.  
 \*Ratio of WV relative to US; a score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates

**Substance: Alcohol**

**Data Source: YRBSS**

**Students Grades 9-12 Reporting Having 5 or More Drinks  
On at Least One Occasion in the Past 30 Days**



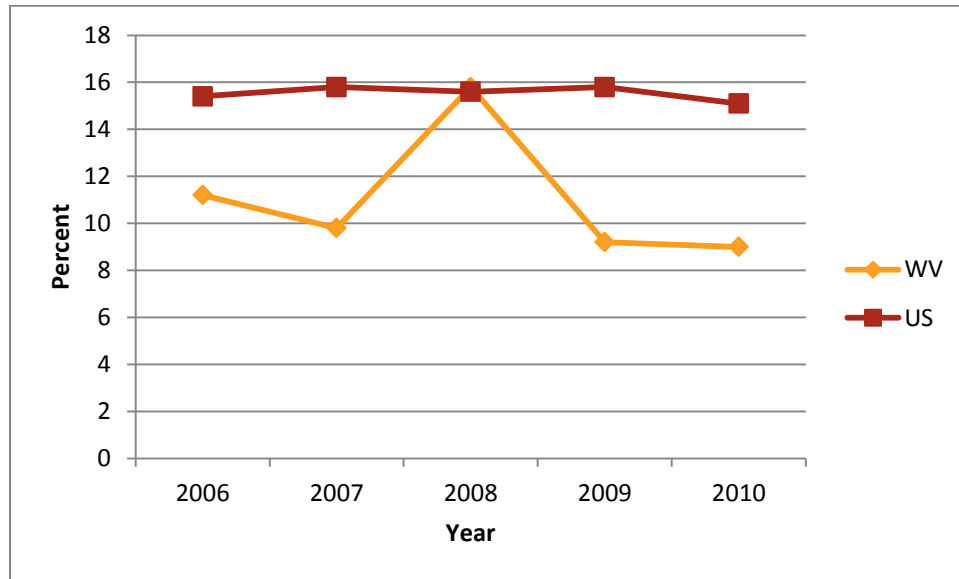
West Virginia	1993	1995	1997	1999	2003	2005	2007	2009
Total	39.4%	38.8%	38.7%	35.5%	33.5%	28.2%	29.5%	27.2%
Female	34.1%	31.3%	31.3%	31.8%	32.7%	25.3%	26.6%	25.4%
Male	44.7%	46.0%	46.0%	38.9%	34.2%	32.2%	32.2%	28.7%
United States	1993	1995	1997	1999	2003	2005	2007	2009
Total	30.0%	32.6%	33.4%	31.5%	28.3%	25.5%	26.0%	24.2%
Female	26.0%	28.6%	28.6%	28.1%	27.5%	23.5%	24.1%	23.4%
Male	33.7%	36.2%	37.3%	34.9%	29.0%	27.5%	27.8%	25.0%
WV:US*	1.2	1.2	1.0	1.1	1.3	1.1	1.1	1.1

\*Ratio of WV relative to US; a score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates

**Substance: Alcohol**

**Data Source: BRFSS**

**Adults Reporting Binge Drinking**



	West Virginia	United States	WV:US*
2006	11.2%	15.4%	0.7
2007	9.8%	15.8%	0.6
2008	15.8%	15.6%	1.0
2009	9.2%	15.8%	0.6
2010	9.0%	15.1%	0.6

\*Ratio of WV relative to US; a score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates

	2006	2007	2008	2009	2010
<b>Gender</b>					
Male	16%	15.3%	14%	14.5%	13.6%
Female	6.7%	4.6%	3.9%	4.1%	4.7%
<b>Age</b>					
18-24	23.7%	13.8%	13.8%	16.2%	18.2%
25-34	16.4%	19.5%	17.4%	18.5%	14.2%
35-44	14.7%	12.7%	10.4%	10.1%	12.2%
45-54	10.8%	9.4%	9.0%	8.4%	8.1%
55-64	4.6%	4.6%	3.9%	5.1%	5.1%
65+	2.0%	1.7%	1.3%	1.2%	1.6%

Note: BRFSS defined binge drinking as males having five or more drinks, females having four or more drinks on at least one occasion within the past 30 days.

## Heavy Drinking

**Indicator Description:** For men, heavy drinking is typically defined as consuming an average of more than 2 drinks per day; for women, heavy drinking is typically defined as consuming an average of more than one drink per day.

**Why Indicator is Important:** Heavy drinking increases a person's risk for many harmful health conditions. Those who are heavy drinkers are at a higher risk for unintentional injuries, violence, and risky sexual behaviors, just to name a few. Over time, heavy drinkers may develop chronic diseases, neurological impairments and social problems.

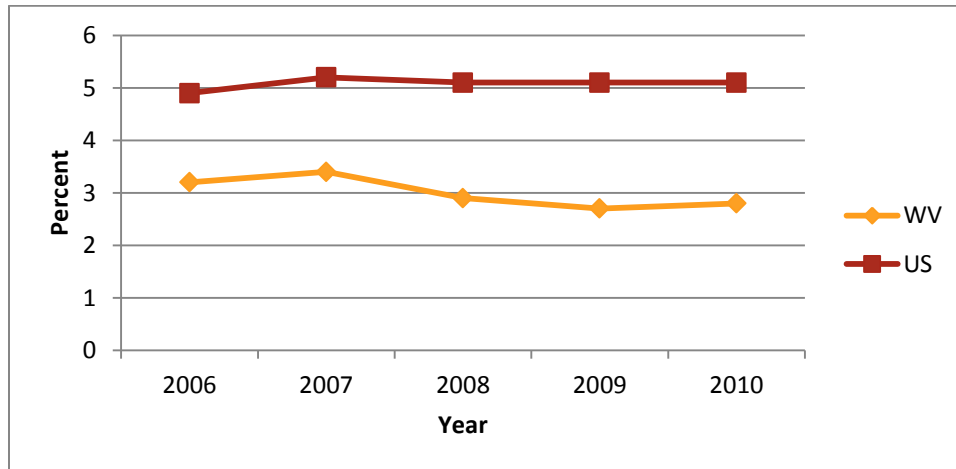
**Key Highlights:**

- West Virginia's rate of adults who drink heavily is below the national average.

**Substance: Alcohol**

**Data Source: BRFSS**

**Adults Reporting Heavy Drinking**



	West Virginia	United States	WV:US
2006	3.2%	4.9%	0.7
2007	3.4%	5.2%	0.7
2008	2.9%	5.1%	0.6
2009	2.7%	5.1%	0.5
2010	2.8%	5.1%	0.5

*\*Ratio of WV relative to US; a score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates*

Gender	2006	2007	2008	2009	2010
Male	4.8%	5.5%	4.2%	3.6%	3.7%
Female	1.7%	1.5%	1.6%	1.8%	2.0%
<b>Age</b>					
18-24	7.4%	3.7%	3.1%	3.8%	2.8%
25-34	3.5%	5.9%	3.6%	3.5%	2.8%
35-44	4.8%	4.8%	2.0%	2.3%	4.1%
45-54	2.5%	3.0%	4.2%	3.1%	3.7%
55-64	1.5%	2.6%	3.4%	2.8%	2.7%
65+	0.9%	1.1%	1.0%	1.2%	1.2%

## Age of Initial Use

**Indicator Description:** Age of initial use is defined as the age at first use for alcohol which helps determine what age group may be more at risk for developing alcohol dependence or other substance abuse problems.

**Why Indicator is Important:** Research indicates those who first use at an early age are more at risk for developing substance abuse and dependence disorders. Determining the average age of first use can help Substance Abuse Prevention Planners develop and initiate appropriate prevention programs.

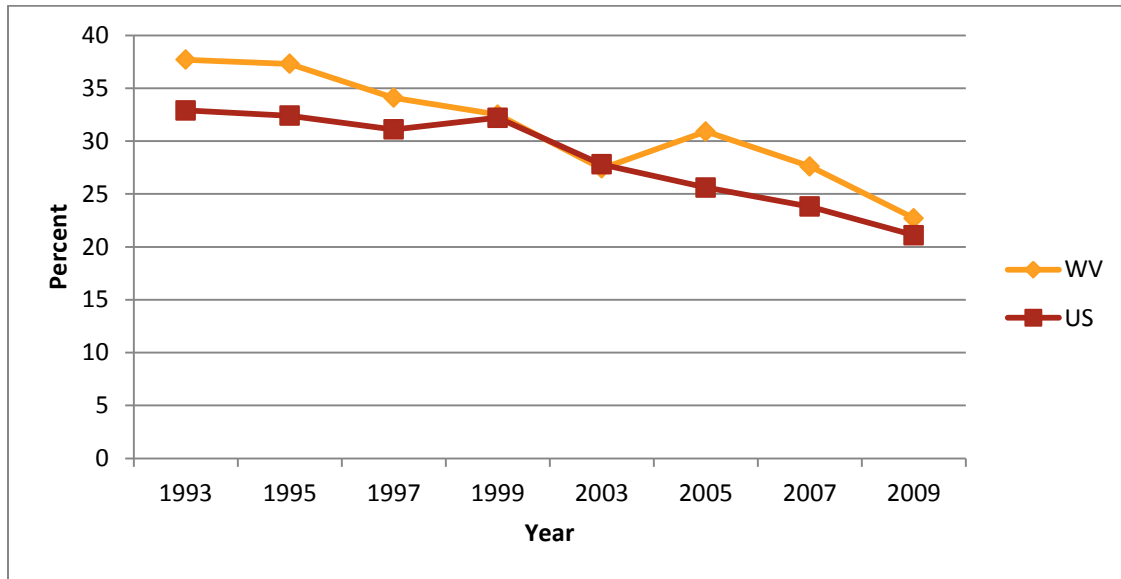
**Key Highlights:**

- Overall, West Virginia males report a higher percent of first alcohol use before age 13.
- West Virginia's rate for students reporting first alcohol use before age 13 is slightly higher than the national rate.
- West Virginia students indicate a decrease in the percent of reporting first alcohol use before age 13 since 2005.

**Substance: Alcohol**

**Data Source: YRBSS**

**Students Grades 9 through 12 Who Report First Use of Alcohol before Age 13**



West Virginia	1993	1995	1997	1999	2003	2005	2007	2009
<b>Total</b>	37.7%	37.3%	34.1%	32.5%	27.4%	30.9%	27.6%	22.7%
<b>Female</b>	29.3%	26.4%	26.8%	26.6%	25.9%	26.9%	23.0%	18.1%
<b>Male</b>	45.6%	47.5%	41.7%	37.7%	28.8%	34.5%	31.9%	26.8%
United States	1993	1995	1997	1999	2003	2005	2007	2009
<b>Total</b>	32.9%	32.4%	31.1%	32.2%	27.8%	25.6%	23.8%	21.1%
<b>Female</b>	27.1%	25.5%	25.7%	26.8%	23.3%	22.0%	20.0%	18.1%
<b>Male</b>	38.2%	38.6%	35.7%	37.4%	32.0%	29.2%	27.4%	23.7%
<b>WV:US*</b>	<b>1.5</b>	<b>1.2</b>	<b>1.1</b>	<b>1.0</b>	<b>1.0</b>	<b>1.2</b>	<b>1.2</b>	<b>1.1</b>

\*Ratio of WV relative to US; a score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates

## Driving and Alcohol

**Indicator Description:** According to the National Highway Traffic Safety Administration (NHTSA), every day almost 30 people in the United States die in a motor vehicle crash that involves an alcohol impaired driver. The annual cost of alcohol related crashes in the US is more than \$51 billion. The more alcohol a person consumes, the higher their BAC and the more impaired they become.

**Why Indicator is Important:** West Virginia ranks 7<sup>th</sup> highest in the nation for motor vehicle related deaths according to NHTSA. Since it is known that alcohol impairs a person's ability to drive, this is a key measure for prevention providers so they can implement effective measures to reduce the number of deaths and injuries from impaired drivers.

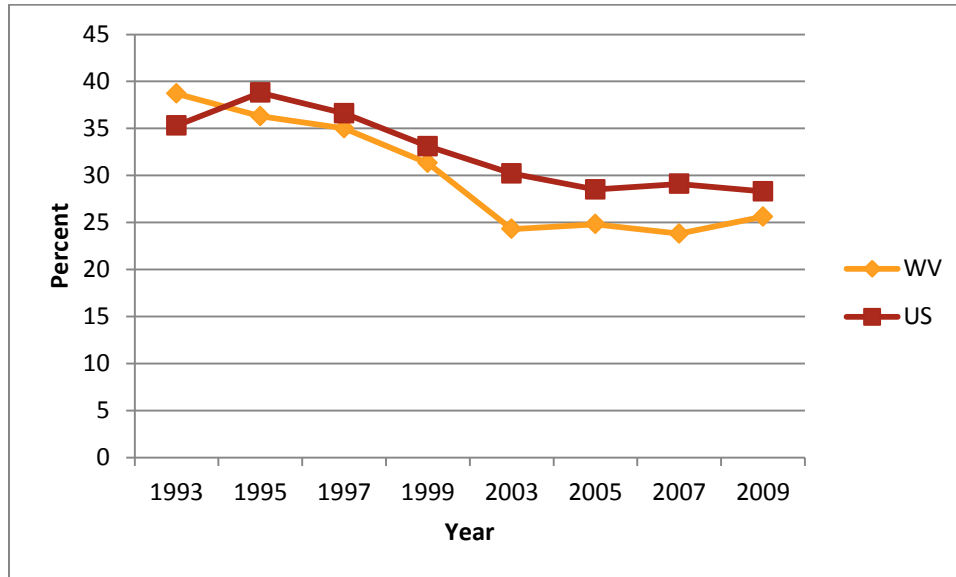
**Key Highlights:**

- In 2009, 25.6% of students grades 9 through 12 reported riding in a car driven by someone who had been drinking.
- West Virginia's rate of students reporting driving when they had been drinking is lower than the national average.

**Substance: Alcohol**

**Data Source: YRBSS**

**Students Grades 9 through 12 who Report Riding in a Car  
Driven by Someone who has been Drinking in the Past 30 Days**



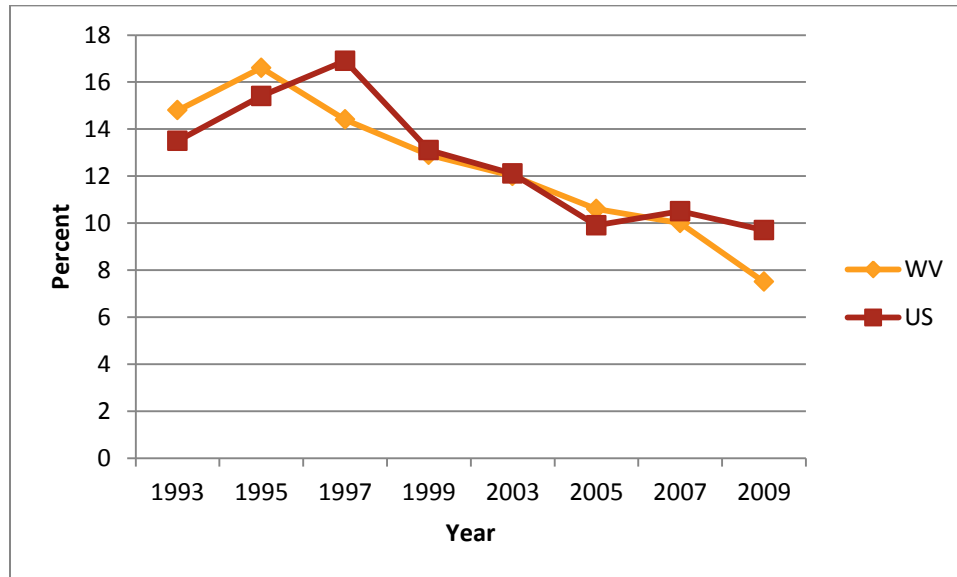
West Virginia	1993	1995	1997	1999	2003	2005	2007	2009
<b>Total</b>	38.7%	36.3%	35.0%	31.3%	24.3%	24.8%	23.8%	25.6%
<b>Female</b>	36.1%	31.9%	27.9%	29.8%	23.9%	20.9%	22.0%	25.9%
<b>Male</b>	41.3%	40.4%	42.5%	32.5%	24.7%	28.4%	25.3%	24.7%
United States	1993	1995	1997	1999	2003	2005	2007	2009
<b>Total</b>	35.3%	38.8%	36.6%	33.1%	30.2%	28.5%	29.1%	28.3%
<b>Female</b>	34.5%	37.8%	34.5%	31.7%	31.1%	29.6%	28.8%	28.8%
<b>Male</b>	36.3%	39.5%	38.3%	34.4%	29.2%	27.2%	29.5%	27.8%
<b>WV:US*</b>	<b>1.1</b>	<b>0.9</b>	<b>1.0</b>	<b>0.9</b>	<b>0.8</b>	<b>0.9</b>	<b>0.8</b>	<b>0.9</b>

\*Ratio of WV relative to US; a score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates

**Substance: Alcohol**

**Data Source: YRBSS**

***Students Grades 9 through 12 Reporting driving in the  
Past 30 days when they had been Drinking Alcohol***



West Virginia	1993	1995	1997	1999	2003	2005	2007	2009
<b>Total</b>	14.8%	16.6%	14.4%	12.9%	12.0%	10.6%	10.0%	7.5%
<b>Female</b>	9.1%	10.8%	8.5%	9.6%	9.3%	5.8%	6.8%	5.9%
<b>Male</b>	20.4%	22.0%	20.7%	15.8%	14.5%	15.2%	12.8%	8.8%
United States	1993	1995	1997	1999	2003	2005	2007	2009
<b>Total</b>	13.5%	15.4%	16.9%	13.1%	12.1%	9.9%	10.5%	9.7%
<b>Female</b>	9.1%	11.9%	10.2%	8.7%	8.9%	8.1%	8.1%	7.6%
<b>Male</b>	17.6%	18.5%	21.0%	17.4%	15.0%	11.7%	12.8%	11.6%
<b>WV:US*</b>	<b>1.1</b>	<b>1.1</b>	<b>0.9</b>	<b>0.7</b>	<b>1.0</b>	<b>1.1</b>	<b>1.0</b>	<b>0.8</b>

*\*Ratio of WV relative to US; a score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates*

## Alcohol Use During Pregnancy

**Indicator Description:** According to the CDC, there is no known safe amount of alcohol to drink while pregnant. Drinking alcohol during the first three months of pregnancy can cause the baby to have abnormal facial features. Growth and central nervous system problems can occur from drinking alcohol anytime during pregnancy. The baby's brain, which develops throughout pregnancy, can be damaged at any time.

**Why Indicator is Important:** Fetal alcohol spectrum disorders (FASDs) are a group of conditions that can occur in a person whose mother drank alcohol during pregnancy. These effects can include physical problems and problems with development, behavior and learning. Prevention providers need this information in order to provide targeted education outreach and intervention to women during preconception and while they are pregnant in order to increase the health outcome of infants.

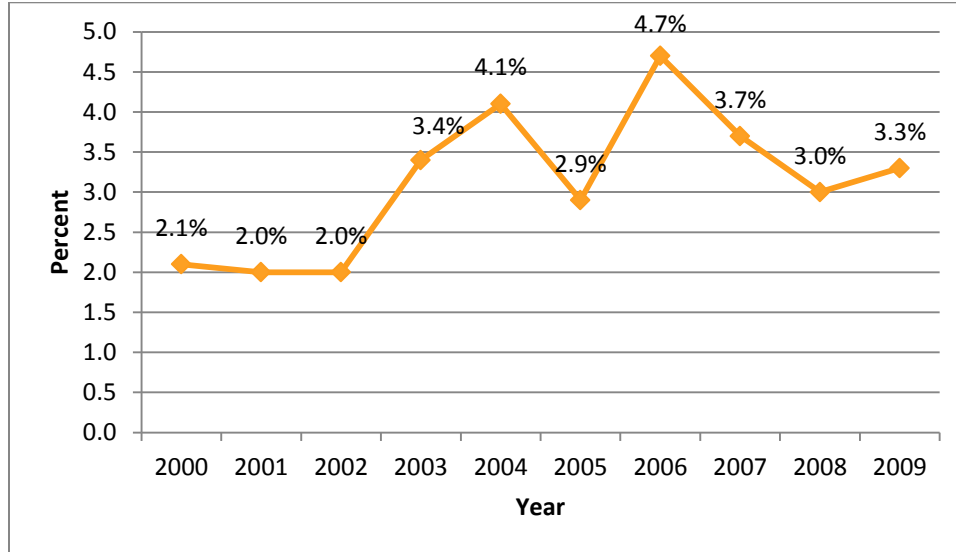
### Key Highlights:

- 3.3% of pregnant women in West Virginia reported drinking alcohol during the last 3 months of their pregnancy.
- West Virginia women aged 35 and older reported the highest use of alcohol during the last 3 months of their pregnancy.
- West Virginia women who had an annual income of \$50,000 or more reported the highest use of alcohol during the last 3 months of pregnancy.

**Substance: Alcohol**

**Data Source: PRAMS**

***Pregnant Women Reporting Any Use of Alcohol during the Last Three Months of Pregnancy***



***Prevalence of Maternal drinking Last 3 Months of Pregnancy by Age***

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
< 20 years	2.5%	1.8%	1.9%	1.3%	2.9%	2.6%	2.5%	1.4%	0.8%	1.4%
20-24 years	1.4%	0.4%	1.1%	3.6%	3.5%	2.5%	5.8%	3.9%	2.6%	2.7%
25-35 years	1.2%	2.3%	2.3%	3.7%	4.2%	2.5%	3.5%	3.7%	3.4%	4.1%
36+ years	3.8%	7.1%	3.6%	3.7%	7.4%	7.0%	10.2%	6.5%	5.0%	5.7%

**Substance: Alcohol**

**Data Source: PRAMS**

**Prevalence of Maternal Drinking the Last 3 Months of Pregnancy by Annual Income**

<b>2000-2003*</b>				
	<b>&lt; \$ 17,000</b>	<b>\$ 17,001- \$19,000</b>	<b>\$ 19,001- \$25,500</b>	<b>≥ \$ 25,501</b>
<b>2000</b>	2.6%	0.1%	2.2%	1.9%
<b>2001</b>	1.6%	2.5%	0.5%	2.6%
<b>2002</b>	2.2%	0.4%	0.6%	2.8%
<b>2003</b>	2.4%	3.3%	4.6%	4.5%

<b>2004-2009*</b>							
	<b>&lt;\$ 10,000</b>	<b>\$10,001- \$14,999</b>	<b>\$15,000- \$19,999</b>	<b>\$20,501- \$24,999</b>	<b>\$25,000- \$34,999</b>	<b>\$35,000- \$49,000</b>	<b>≥ \$50,000</b>
<b>2004</b>	5.7%	0.6%	0.5%	0.0%	3.4%	10.9%	4.3%
<b>2005</b>	3.1%	1.5%	3.8%	0.2%	7.0%	1.6%	2.5%
<b>2006</b>	4.4%	3.1%	13.9%	2.5%	8.5%	1.8%	3.5%
<b>2007</b>	2.8%	2.2%	4.2%	0.6%	8.4%	2.9%	5.3%
<b>2008</b>	2.7%	2.6%	7.3%	0.2%	1.2%	3.4%	3.4%
<b>2009</b>	2.5%	1.0%	1.8%	3.6%	1.7%	3.2%	6.4%

\*2000-2003 questionnaire format (phase 4) for annual income answer options differed from 2004-2009 questionnaire formats (phase 5 and phase 6).

**Percent of Infants in NICU by Prevalence of Maternal Drinking Last 3 Months of Pregnancy**

	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
<b>Drinker</b>	9.3%	6.3%	5.3%	11.7%	10.1%
<b>Non-drinker</b>	9.8%	10.5%	9.7%	9.2%	10.5%

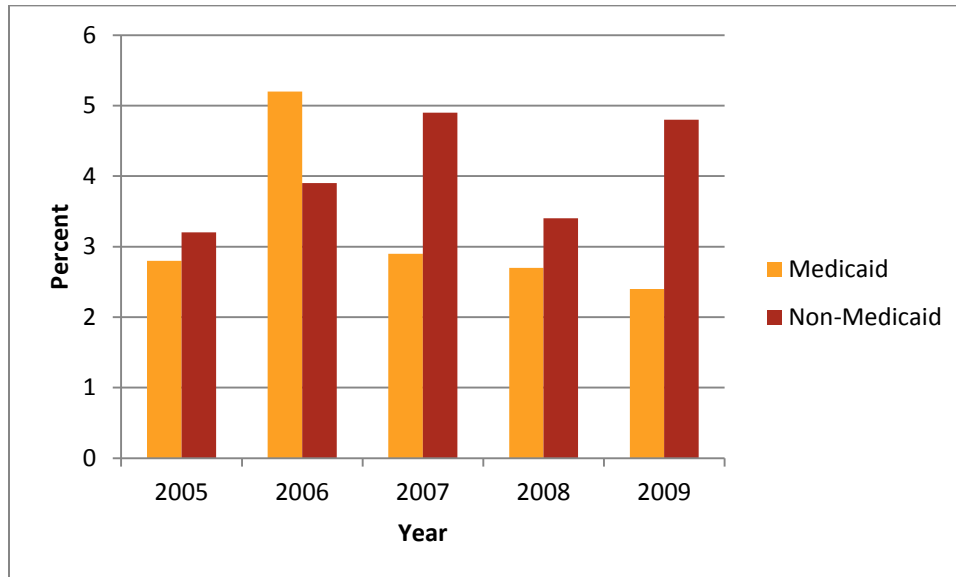
**Prevalence of Maternal Drinking Last 3 Months of Pregnancy  
By Low Birth weight (< 2500 grams) Infants**

	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
<b>Drinker</b>	7.5%	5.9%	6.5%	6.6%	6.0%
<b>Non-drinker</b>	8.6%	9.0%	8.8%	8.8%	8.2%

**Substance: Alcohol**

**Data Source: PRAMS**

***Prevalence of Maternal Drinking Last 3 Months of Pregnancy  
By Medicaid for Prenatal Care and/or Delivery Payment***

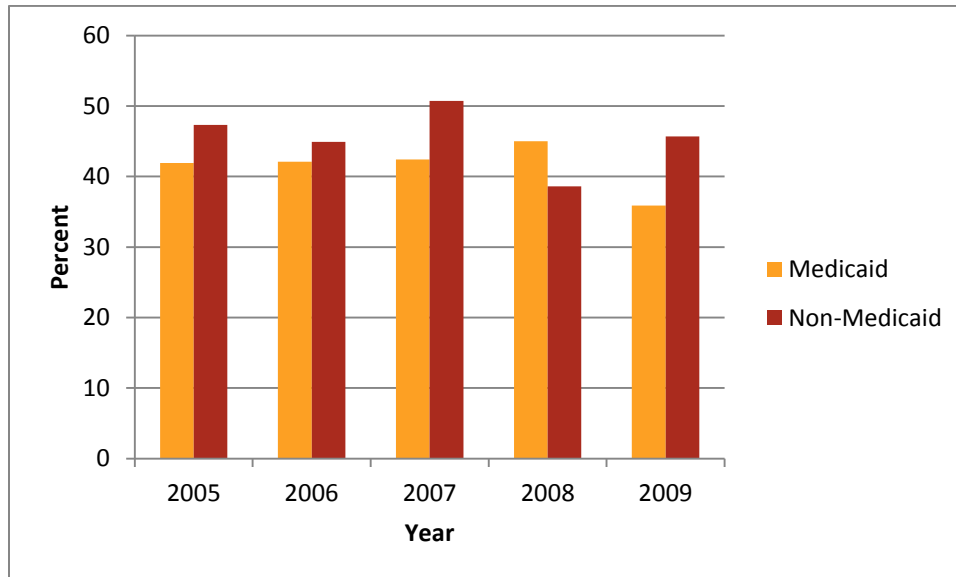


	2005	2006	2007	2008	2009
Medicaid	2.8%	5.2%	2.9%	2.7%	2.4%
Non-Medicaid	3.2%	3.9%	4.9%	3.4%	4.8%

**Substance: Alcohol**

**Data Source: PRAMS**

***Prevalence of Maternal Drinking 3 Months before Pregnancy  
By Medicaid for Prenatal Care***



	2005	2006	2007	2008	2009
Medicaid	41.9%	42.1%	42.4%	45.0%	35.9%
Non-Medicaid	47.3%	44.9%	50.7%	38.6%	45.7%

## Apparent per Capita Ethanol Consumption

**Indicator Description:** The average per capita ethanol consumption summarizes the amount of alcohol consumed by West Virginians. This estimate can also be broken into the three distinct categories of wine, beer, and spirits (liquor).

**Why Indicator is Important:** This indicator is important because it portrays the actual consumption of alcohol which can be compared nationally or to other states.

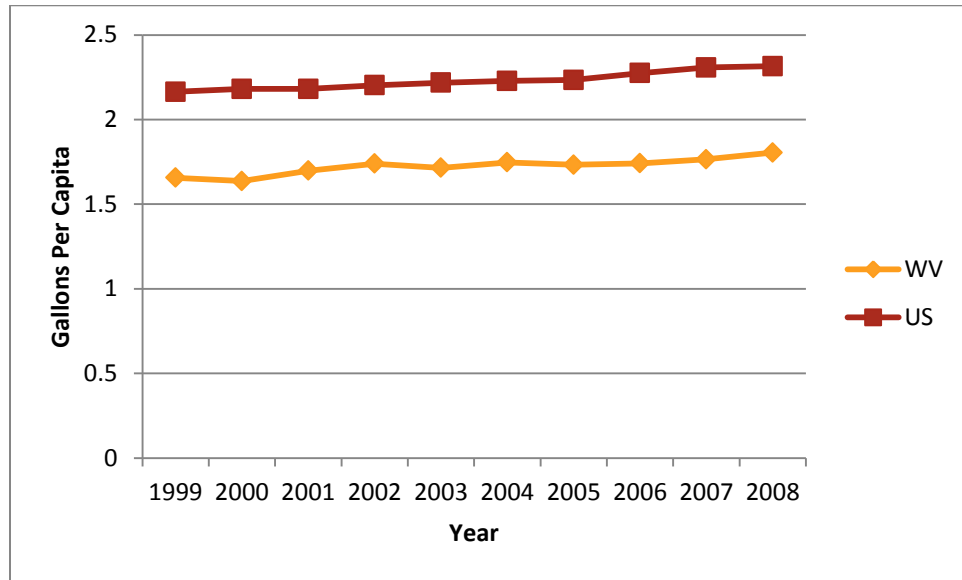
**Key Highlights:**

- West Virginia's per capita alcohol consumption in gallons is less than the national average.
- West Virginia consumed more beer than wine and spirits combined in 2008.

**Substance: Alcohol**

**Data Source: NIAAA**

***Apparent per Capita Alcohol Consumption in Gallons***



Year	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
West Virginia	1.7	1.6	1.7	1.8	1.7	1.7	1.7	1.7	1.8	1.8
United States	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3

***Per Capita Ethanol Consumption in Gallons among Persons Age 14 and Older by Type***

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Beer	1.2	1.2	1.2	1.3	1.2	1.3	1.2	1.2	1.2	1.3
Spirits	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Wine	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

## Alcohol Consequences

### Alcohol-Attributable Deaths

**Indicator Description:** The CDC reports that excessive alcohol consumption is one of the leading preventable causes of death in the United States. The CDC estimates the number of alcohol-attributable deaths and years of potential life lost. Alcohol-attributable deaths are based on studies assessing the proportion of deaths from a particular condition at or above a specified blood alcohol concentration. Alcohol contributes to various chronic health conditions and can lead to reduced life expectancy due to a chronic illness caused by alcohol abuse. The following section highlights some of the consequences to abusing alcohol.

**Why Indicator is Important:** This indicator is important as it puts a value on the consequences of alcohol abuse. Alcohol abuse can have negative impacts that affect the quality and length of one's life. It is important to track these consequences to measure the impact that alcohol abuse has on a state and to evaluate if prevention measures are effective at reducing the negative impacts.

**Key Highlights:**

- Alcohol-attributable deaths among males double that of females in both West Virginia and the United States.
- The rate of deaths from chronic liver disease and cirrhosis in West Virginia was 1.3 deaths per 10,000 people in 2009.

**Substance: Alcohol**

**Data Source: ARDI**

**Average Alcohol-Attributable Deaths Due to Excessive Alcohol Use, 2001-2005**

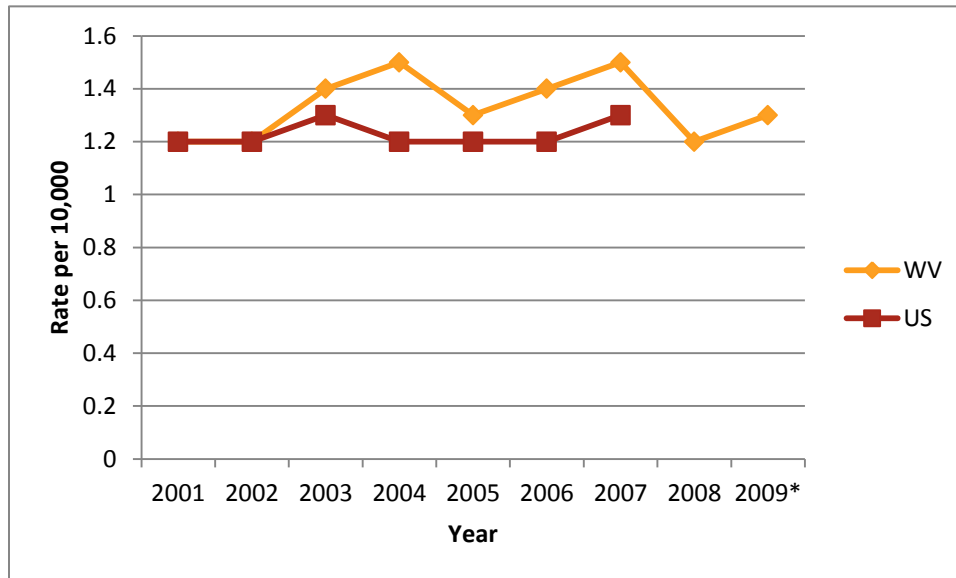
Chronic Causes	West Virginia			United States		
	Overall	Males	Females	Overall	Males	Females
Acute pancreatitis	6	4	2	695	366	329
Alcohol abuse	21	18	3	2,382	1,868	514
Alcohol cardiomyopathy	2	2	0	448	389	59
Alcohol dependence syndrome	14	13	1	3,857	3,037	820
Alcohol-induced chronic pancreatitis	1	1	0	311	248	63
Alcoholic gastritis	0	0	0	21	17	4
Alcoholic liver disease	80	67	13	12,219	8,938	3,281
Alcoholic psychosis	2	2	0	751	568	183
Breast cancer (females only)	2	0	2	417	0	417
Cholelithiasis	0	0	0	0	0	0
Chronic hepatitis	< 1	0	< 1	4	2	2
Chronic pancreatitis	0	0	0	229	118	112
Degeneration of nervous system due to alcohol	0	0	0	91	77	14
Epilepsy	< 1	< 1	< 1	191	102	88
Esophageal cancer	3	3	< 1	525	466	59
Esophageal varices	0	0	0	74	53	20
Gastroesophageal hemorrhage	0	0	0	29	16	13
Hypertension	7	4	3	1,544	836	708
Ischemic heart disease	6	5	1	983	682	300
Laryngeal cancer	2	2	< 1	267	231	35
Liver cancer	4	3	1	893	671	222
Liver cirrhosis unspecified	64	35	29	7,055	4,134	2,921
Low birth weight prematurity IUGR death*	1	< 1	< 1	184	122	62
Oropharyngeal cancer	2	2	< 1	406	345	61
Portal hypertension	0	0	0	40	26	14
Prostate cancer (males only)	1	1	0	241	241	0
Stroke hemorrhagic	10	9	2	1,847	1,520	327
Stroke ischemic	4	3	1	715	519	196
Supraventricular cardiac dysrhythmia	1	1	1	219	96	123
<b>Subtotal</b>	<b>235</b>	<b>175</b>	<b>60</b>	<b>36,643</b>	<b>25,693</b>	<b>10,950</b>

Acute Causes	West Virginia			United States		
	Overall	Males	Females	Overall	Males	Females
Air-space transport	< 1	< 1	0	125	104	21
Alcohol poisoning	0	0	0	370	292	78
Aspiration	1	< 1	1	204	109	95
Child maltreatment	1	< 1	< 1	168	96	72
Drowning	5	5	0	868	716	152
Fall injuries	41	21	20	5,532	2,888	2,644
Fire injuries	10	7	3	1,158	692	466
Firearm injuries	2	2	0	123	108	15
Homicide	38	25	12	7,787	6,174	1,613
Hypothermia	1	1	< 1	269	182	87
Motor-vehicle non-traffic crashes	4	3	1	183	147	36
Motor-vehicle traffic crashes	119	91	28	13,819	10,802	3,016
Occupational and machine injuries	2	2	0	138	130	7
Other road vehicle crashes	1	1	< 1	210	165	45
Poisoning (not alcohol)	56	39	17	5,416	3,669	1,747
Suicide	62	52	9	7,235	5,778	1,457
Suicide by exposure to alcohol	0	0	0	31	22	9
Water transport	< 1	< 1	0	98	87	11
Subtotal	342	251	91	43,731	32,159	11,572

**Substance: Alcohol**

**Data Source: HSC and NVSS**

**Deaths from Chronic Liver Disease and Cirrhosis**



West Virginia	2001	2002	2003	2004	2005	2006	2007	2008	2009
Chronic Liver Disease and Cirrhosis	215	211	250	264	230	247	275	225	241
Rate per 10,000	1.2	1.2	1.4	1.5	1.3	1.4	1.5	1.2	1.3
United States	2001	2002	2003	2004	2005	2006	2007	2008	2009
Chronic Liver Disease and Cirrhosis	34,840	35,671	36,523	36,022	36,783	37,054	38,963	N/A	N/A
Rate per 10,000	1.2	1.2	1.3	1.2	1.2	1.2	1.3	N/A	N/A
WV:US*	1.0	1.0	1.1	1.3	1.1	1.2	1.2	N/A	N/A

\*Ratio of WV relative to US; a score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US Rates. N/A Data not available.

Note: Many things can cause cirrhosis. A common cause of cirrhosis is the excessive intake of alcohol. Hepatitis B and Hepatitis C also cause inflammation of the liver leading to cirrhosis. Hepatitis C is the leading cause of cirrhosis and injectable drug use is a risk factor in contracting Hepatitis C.

## Alcohol Overdoses

**Indicator Description:** Alcohol overdoses are caused by drinking too much alcohol. Alcohol can be extremely dangerous if it is consumed in an excessive manner. When an individual has drunk too much alcohol faster than the liver can actually process, one can have alcohol poisoning. Alcohol poisoning has many symptoms which include: rapid heart rate, irregular breathing, blue-tinged skin, unconsciousness, seizures, and can result in death. The following section summarizes alcohol overdose deaths.

**Why Indicator is Important:** This indicator is important because it puts a value on the consequences of alcohol abuse. It is important to track these consequences to measure the impact that alcohol abuse has on a state and to evaluate if prevention measures are effective at reducing the negative impacts.

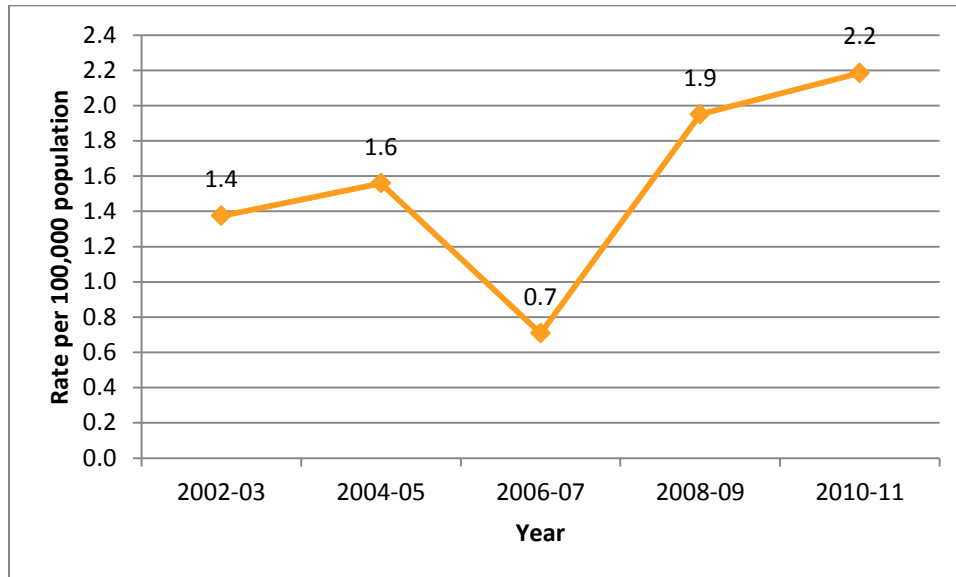
**Key Highlights:**

- In 2010-2011, the rate of alcohol overdose deaths in West Virginia had increased to 2.2 deaths per 100,000 individuals.

**Substance: Alcohol**

**Data Source: HSC**

***Alcohol Related Overdoses in West Virginia***



	2002-03	2004-05	2006-07	2008-09	2010-11
Alcohol Related Overdose Deaths	50	57	26	72	81
Rate per 100,000 Population	1.4	1.6	0.7	1.9	2.2

## Motor Vehicle Crashes

**Indicator Description:** Alcohol has damaging effects on the brain. Difficulty walking, blurred vision, impaired memory, and slow reaction times are just a few of the effects. While drinking and driving is illegal, alcohol also impairs a person's ability to drive. Drinking and driving can have severe criminal and social consequences.

**Why Indicator is Important:** This indicator is important because it puts a value on the consequences of alcohol abuse. Alcohol abuse can have negative impacts that affect all facets of one's life from their health to criminal charges. It is important to track these consequences to measure the impact that alcohol abuse has on a state and to evaluate if prevention measures are effective at reducing the negative impacts.

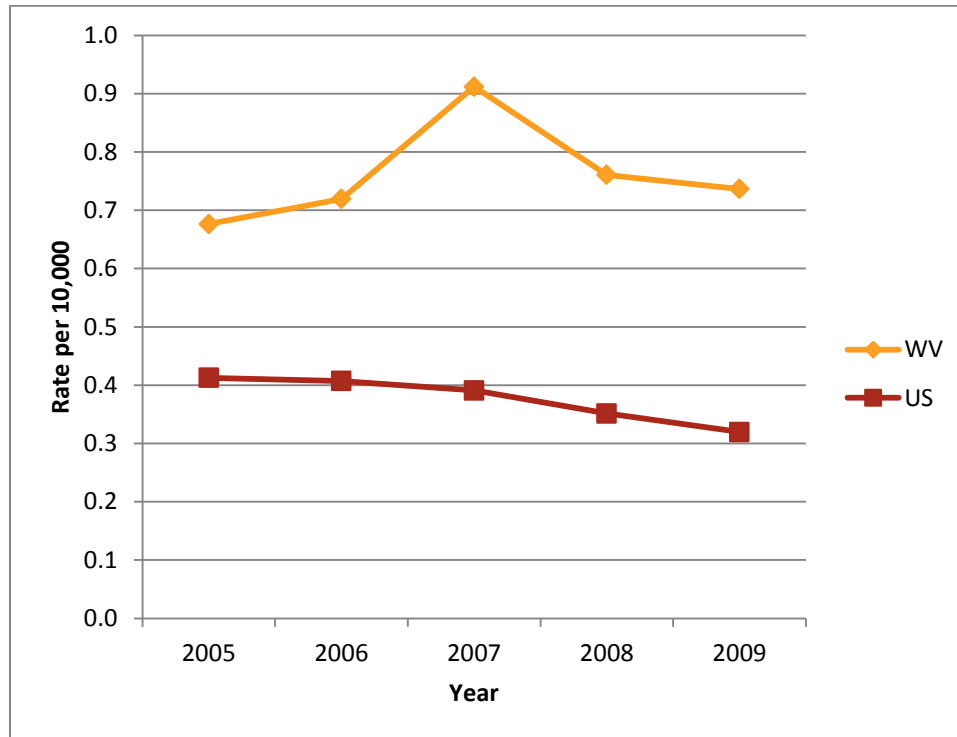
**Key Highlights:**

- In 2009, alcohol was a factor in 40% of fatal motor vehicle crashes in West Virginia.
- The number of alcohol related fatal motor vehicle crashes in West Virginia has decreased from 3,293 in 2006 to 1,647 in 2010.
- West Virginia has a higher rate of motor vehicle crashes that are fatal compared to the United States.

**Substance: Alcohol**

**Data Source: FARS**

**Alcohol-Related Fatal Traffic Crashes (Driver BAC 0.01 or higher)**



West Virginia	2005	2006	2007	2008	2009
Number of Alcohol Positive Fatal Crashes	122	130	165	138	134
Total Fatal Crashes	374	410	432	378	356
Percent of Fatal Crashes	65.8%	65.9%	58.8%	34.1%	40.2%
Rate per 10,000	1.4	1.5	1.4	0.7	0.8
United States	2005	2006	2007	2008	2009
Number of Alcohol Positive Fatal Crashes	12,199	12,150	11,780	10,684	9,813
Total Fatal Crashes	39,252	38,648	37,435	34,172	30,797
Percent of Fatal Crashes	31.1%	31.4%	31.5%	31.3%	31.9%
Rate per 10,000	0.4	0.4	0.4	0.4	0.3
WV: US*	3.5	3.75	3.5	1.8	2.7

\*Ratio of WV relative to US; a score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US Rates.

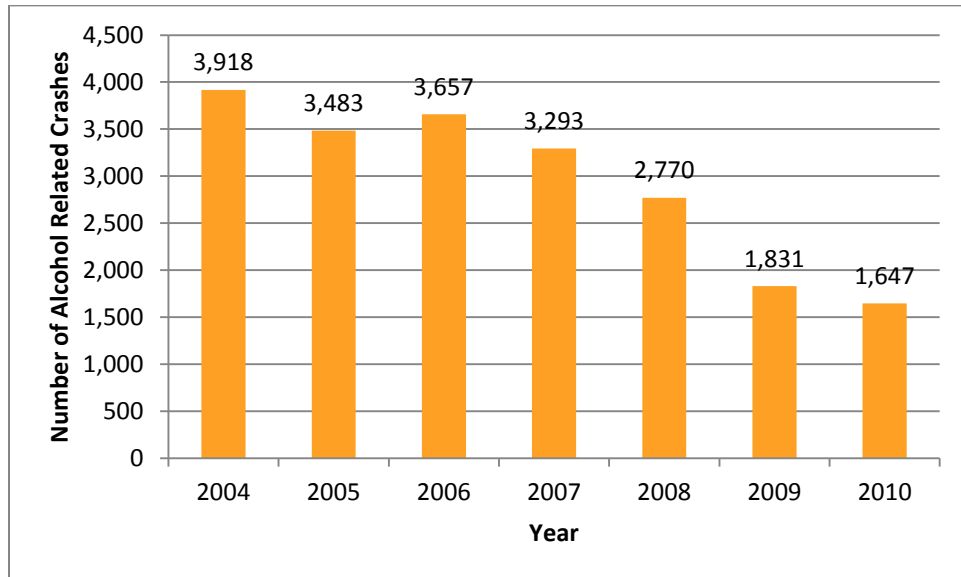
***Persons Killed, by Highest Driver BAC in the Crash***

<b>Year</b>	<b>BAC = .00</b>		<b>BAC = .01-.07</b>		<b>BAC = .08+</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
<b>2005</b>	249	67%	12	3%	110	29%
<b>2006</b>	278	68%	25	6%	105	26%
<b>2007</b>	267	62%	27	6%	138	32%
<b>2008</b>	238	63%	13	3%	126	33%
<b>2009</b>	221	62%	19	5%	115	32%

**Substance: Alcohol**

**Data Source: West Virginia Traffic Accident Database**

**Motor Vehicle Crashes Associated with Alcohol**



*Note: In 2008 a new crash reporting system was implemented*

## Alcohol Related Hospitalizations

**Indicator Description:** The effects of alcohol abuse can send individuals to the hospital. The following section summarizes the hospital discharges from West Virginia with alcohol abuse or dependence in the diagnosis at the time of discharge.

**Why Indicator is Important:** This indicator is important it puts a value on the consequences of alcohol abuse. Alcohol abuse can have negative impacts that affect all facets of one's life from their health to criminal charges. It is important to track these consequences to measure the impact that alcohol abuse has on a state and to evaluate if prevention measures are effective at reducing the negative impacts. Acute alcohol intoxication, also known as drunkenness or inebriation, is a physiological state that occurs when a person has a very high level of alcohol in his or her blood. Alcohol dependence is often referred to as alcoholism, which is the addiction or dependency upon drinking excessive amounts of alcohol beverages. Alcohol dependence is the cyclic presence of tolerance, withdrawal, and excessive alcohol use; the drinker's inability to control such compulsive drinking, despite awareness of its harm to his or her health.

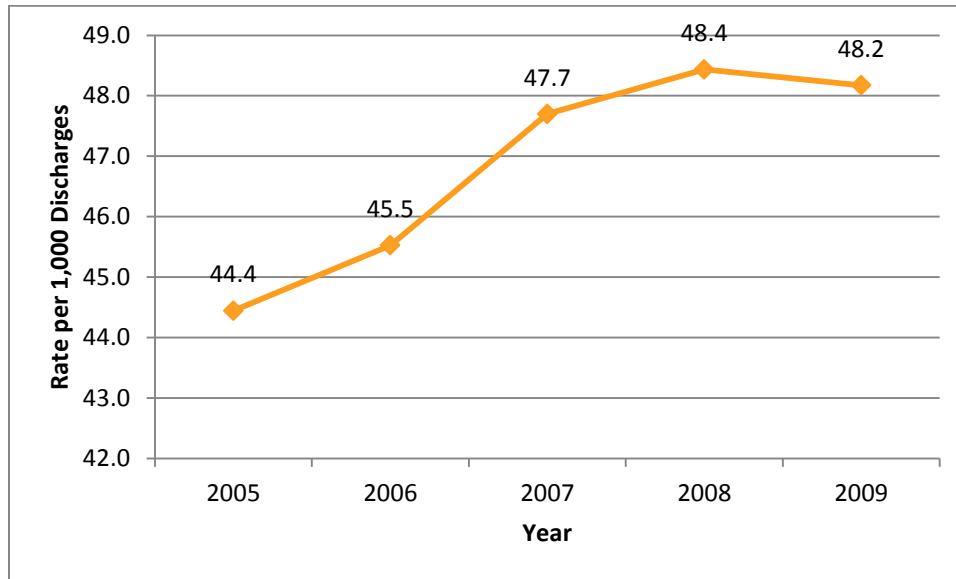
### Key Highlights:

- Alcohol dependence diagnoses make up 83% all alcohol related diagnoses in 2009.
- The rate of alcohol related discharges in West Virginia was 48.2 discharges per 100,000 people in West Virginia.

**Substance: Alcohol**

**Data Source: HCUPnet**

**Hospitalization Discharges with a Alcohol Related-Diagnosis\***



*\*Alcohol related discharges were identified using all-listed ICD-9CM diagnosis codes 291, 303, 305.0, 357.5, 425.5, 535.3, 571.0, 571.1, 571.2, 760.71, 790.3, 980.0, E860.0, E860.1*

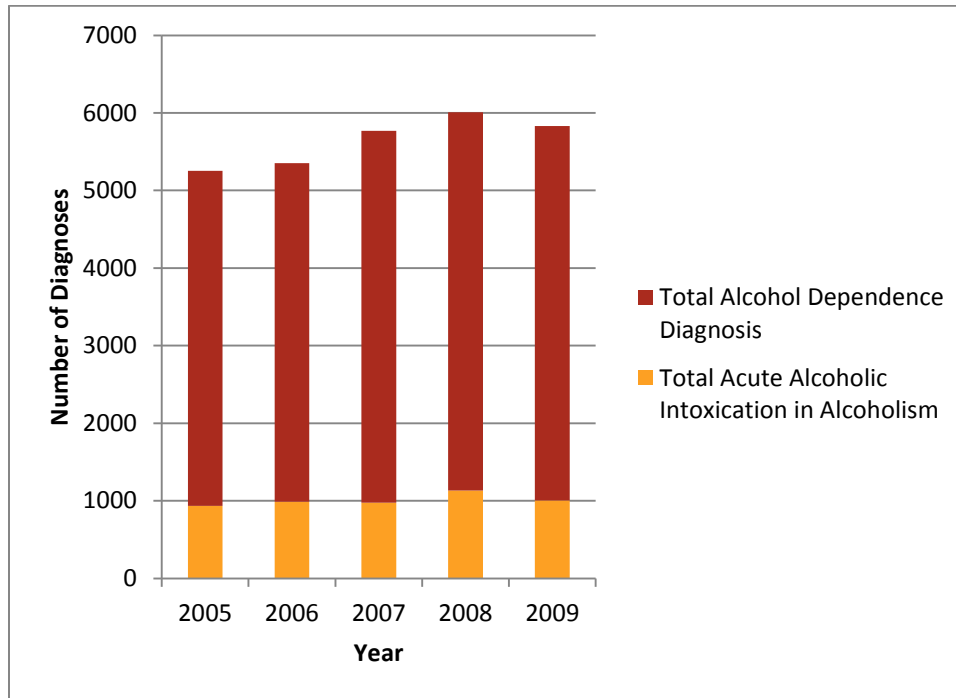
*Note: Y-Axis does not start at zero*

ICD-9-CM all-listed diagnosis code and name	2005	2006	2007	2008	2009
Total of Alcohol Related Discharges	12,620	12,913	13,527	13,852	13,634
Total Number of Discharges	283,964	283,651	283,599	285,997	283,023
Rate per 1,000 Discharges	44.4	45.5	47.7	48.4	48.2

**Substance: Alcohol**

**Data Source: HCUPnet**

***Hospitalization Discharges with a Alcohol Abuse/Dependence Related-Diagnosis\****



\*Alcohol Abuse/Dependence related discharges were identified using all-listed ICD-9CM diagnosis codes 303.00, 303.01, 303.02, 303.03, 303.90, 303.91, 303.92, and 303.93.

ICD-9-CM	2005	2006	2007	2008	2009
Total Acute Alcoholic Intoxication in Alcoholism Diagnosis	933	987	976	1,133	1,003
Total Alcohol Dependence Diagnosis	4,321	4,364	4,793	4,873	4,827
Total Alcohol Related Diagnosis	5,254	5,351	5,769	6,006	5,830
All Discharges	283,964	283,651	283,599	285,997	283,023
Rate per 1,000 Discharges	18.5	18.9	20.3	21.0	20.6

## Treatment

**Indicator Description:** The Treatment Episode Data Set (TEDS) includes records for some 1.5 million substance abuse treatment admissions annually. This section describes the number of admissions to state funded facilities for the treatment of alcohol abuse and dependence.

**Why Indicator is Important:** This indicator is important because it illustrates the proportion of admissions to substance abuse treatment facilities which constitute a burden on public funds. In addition, this data allows providers to focus efforts to address the needs of the people in treatment by their primary substance of abuse or misuse.

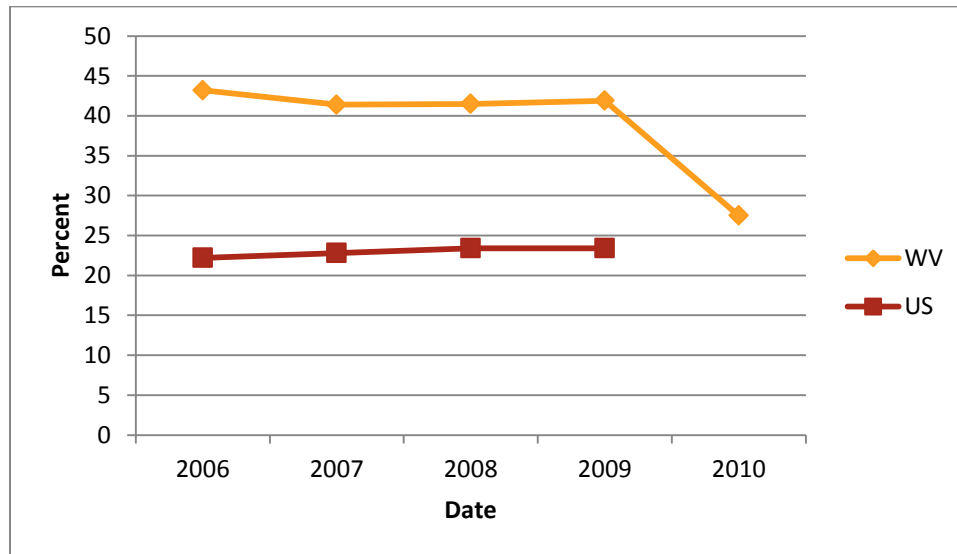
**Key Highlights:**

- Treatment admissions for alcohol as a primary substance in West Virginia have been twice as high as the United States from 2006 to 2009.

Substance: Alcohol

Data Source: TEDS

Percentage of Treatment Admissions, 2006-2010, for Alcohol as Primary Substance



West Virginia	2006	2007	2008	2009	2010
Total	43.2%	41.4%	41.5%	41.9%	27.5%
Male	77.0%	74.5%	75.6%	76.0%	72.7%
Female	22.7%	25.3%	24.3%	24.0%	27.3%
United States	2006	2007	2008	2009	2010
Total	22.2%	22.8%	23.4%	23.4%	N/A
Male	74.3%	73.8%	73.4%	73.3%	N/A
Female	25.6%	26.2%	26.6%	26.7%	N/A
WV:US*	1.9	1.8	1.8	1.8	-

\*Ratio of WV relative to US; a score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates. N/A: Data not available.

## Crime

**Indicator Description:** A report from The US Department of Justice on Alcohol and Crime found that alcohol abuse was a factor in 40 percent of violent crimes committed in the United States. Crime that is more commonly associated with alcohol consumption is driving under the influence (DUI). DUI is the act of driving a motor vehicle with blood levels of alcohol in excess of .08% in West Virginia. DUI is a criminal offense and can have serious consequences, including a prison sentence.

**Why Indicator is Important:** This indicator is important as it puts a value on the consequences of alcohol abuse. Alcohol abuse can have negative impacts that affect all facets of one's life from their health to criminal charges. It is important to track these consequences to measure the impact that alcohol abuse has on a state and to evaluate if prevention measures are effective at reducing the negative impacts.

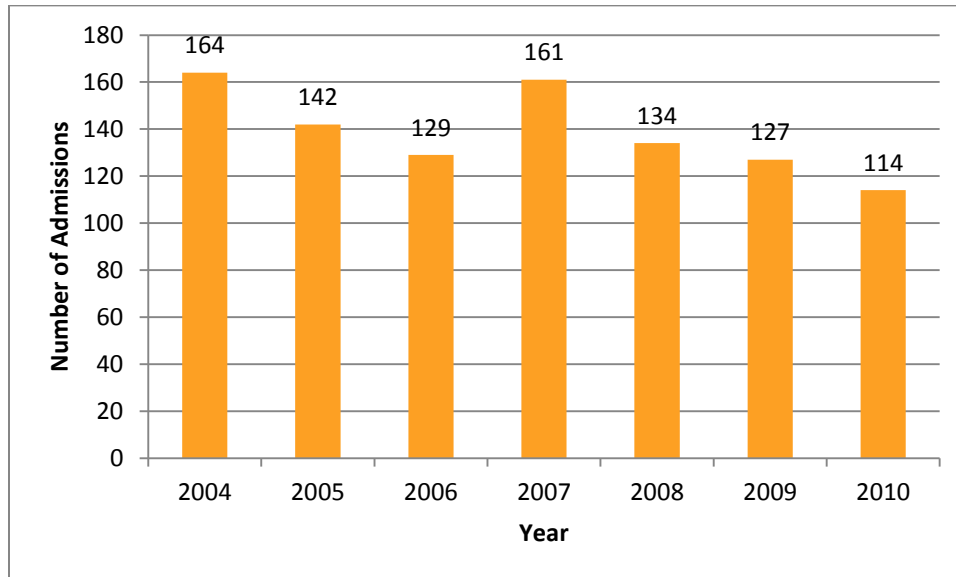
**Key Highlights:**

- In 2010, the rate for DUI arrests in West Virginia was 33.6 per 10,000 arrests.

***Substance: Alcohol***

***Data Source: IMIS and WVIBRS***

***Adults Admitted to a Correctional Facility for Felony DUI***



*Note: Admissions include all those offenders entering a Division of Correctional facility during the indicated year for DUI.*

***Individuals Arrested for DUI in West Virginia***

	2008	2009	2010
DUI Arrests	6,841	6,574	6,108
Rate per 10,000	37.7	36.1	33.6

**Substance: Alcohol**

**Data Source: WVIBRS**

***Violent Offenses Reported in West Virginia***

<b>Offence</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
<b>Aggravated Assault</b>	3,263	3,109	3,113	3,001	2,922	3,125
<b>Sex Assaults</b>	1,232	1,197	1,221	1,269	1,276	1,169
<b>Forcible Rape</b>	371	323	373	362	366	367
<b>Forcible Sodomy</b>	105	91	87	82	82	77
<b>Sex Assaults with object</b>	166	184	182	211	268	207
<b>Forcible Fondling</b>	450	465	461	515	459	427
<b>Incest</b>	21	20	33	18	21	17
<b>Statutory Rape</b>	119	114	85	81	80	74
<b>Robbery</b>	743	776	811	806	831	815
<b>Total Violent</b>	5,238	5,082	5,145	5,076	5,029	5,109

***Property Offenses Reported in West Virginia***

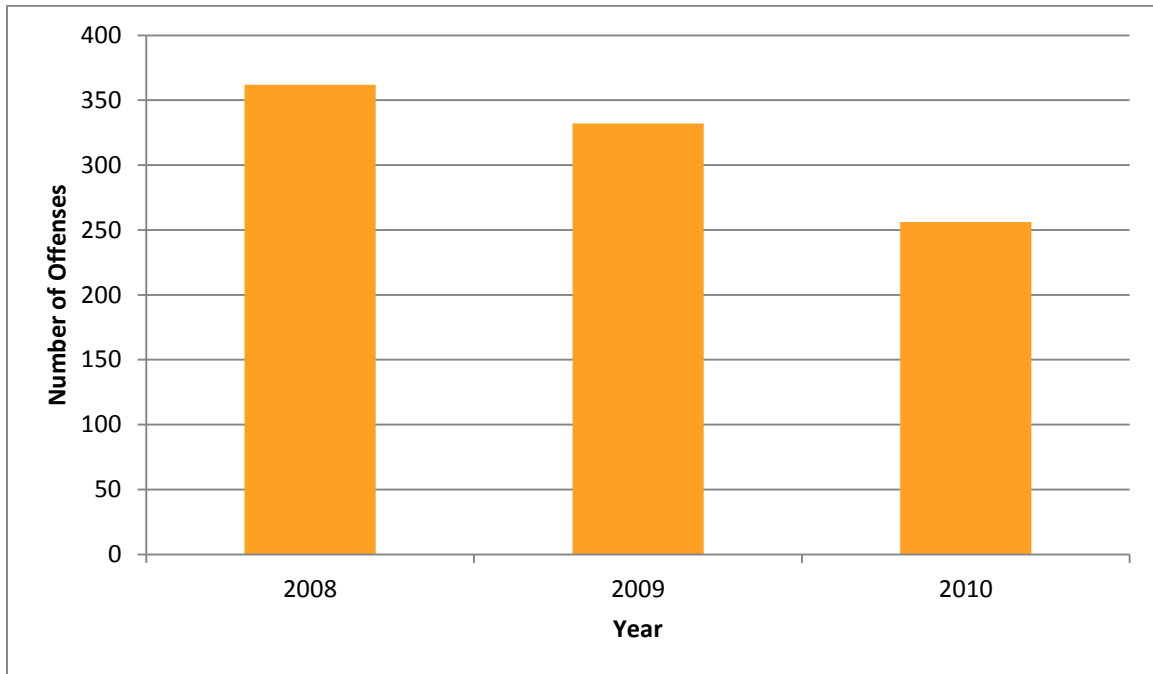
<b>Offence</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
<b>Larceny</b>	30,271	31,469	30,577	29,662	29,859	28,198
<b>Pocket Picking</b>	29	47	32	37	46	37
<b>Purse Snatching</b>	138	146	138	100	135	113
<b>Shoplifting</b>	3,881	4,084	3,865	4,475	4,943	5,648
<b>Theft from Building</b>	2,631	2,935	2,724	2,360	2,291	2,049
<b>Theft from Coin Operated Device</b>	198	209	110	71	76	77
<b>Theft from Motor Vehicle</b>	7,212	7,325	6,779	5,560	5,487	5,209
<b>Theft Motor Vehicle Parts</b>	2,154	2,359	2,270	2,319	2,108	1,857
<b>All Other Larceny</b>	14,028	14,364	14,659	14,740	14,773	13,208
<b>Burglary</b>	10,332	10,457	10,468	9,683	9,925	10,380
<b>Motor Vehicle Theft</b>	3,556	3,587	3,689	3,226	2,907	2,467
<b>Total Property</b>	44,159	45,513	44,734	42,571	42,691	41,045

*Note: Sex assaults and Larceny are the sums of the individual crimes shown here. Total Violent and Total Property are the sums of the crime categories; not necessarily the total crime indices. Caution should be used when making year to year comparisons due to differences in reporting levels of agencies over time.*

**Substance: Alcohol**

**Data Source: WV Centralized Juvenile Probation Data System**

**Juvenile Probation Cases with Alcohol-Related Offenses**



	2008	2009	2010
Alcohol: Underage Consumption/Possession	225	128	99
Beer: Underage Consumption/Possession	48	68	50
Time restrictions on sale of non-intoxicating beer	5	26	3
Underage Furnishing Beer	0	1	0
Underage person purchasing beer or wine	15	6	10
Sell or deliver wine unlawfully purchased	2	4	0
Providing alcohol to underage person not related	0	1	1
Purchase alcohol while under 21	31	35	40
DUI - First Offense	18	32	19
DUI - Second Offense	0	1	0
DUI with Death - Reckless Disregard - Felony	0	0	1
DUI with Injury - Misdemeanor	3	1	3
Habitual User Driving Vehicle	0	0	1
Intoxication or drinking in public places	15	24	27
Give alcohol to person under 21	0	5	2
Total Alcohol-Related Juvenile Offenses	362	332	256

## Dependence or Abuse

**Indicator Description:** The Diagnostic and Statistical Manual of Mental Disorders (DSM) is a handbook published by the American Psychiatric Association (APA) and contains the standard classification of mental disorders used by many mental health professionals in the United States. Alcohol Abuse is defined as when a person drinks too much and too often but still may not be dependent on alcohol. Alcohol Dependence is different from alcohol abuse by the presence of symptoms such as tolerance and withdrawal.

**Why Indicator is Important:** Alcohol abuse and dependence create problems in one's life which include not being able to meet work, school, or family responsibilities; drunk driving arrests and car crashes; and drinking related medical conditions. Proper diagnosis is essential in determining appropriate treatment for individuals for alcohol abuse or dependence.

**Key Highlights:**

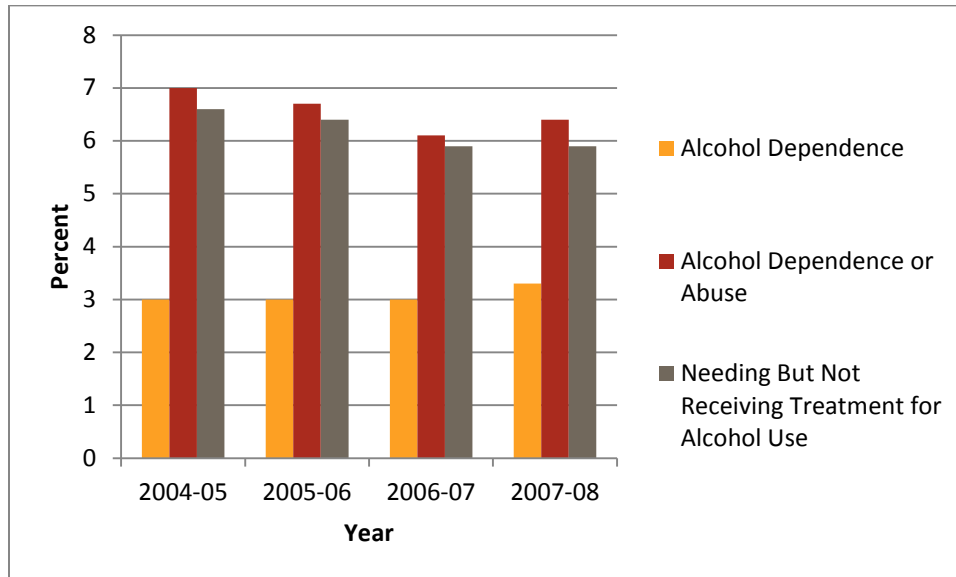
- The percentage of persons reporting needing but not receiving treatment for alcohol use in West Virginia is below the national average.
- The percentage of individuals in West Virginia reporting abuse or dependence on alcohol has stayed consistent since 2004.

**Substance: Alcohol**

**Data Source: NSDUH**

**West Virginia**

**Persons Aged 12 and Older Meeting DSM-IV Criteria for Alcohol Abuse or Dependence**



*Note: Dependence or abuse is based on definition found in the 4<sup>th</sup> edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).*

West Virginia	2004-05	2005-06	2006-07	2007-08
Alcohol Dependence	3.0%	3.0%	3.0%	3.3%
Alcohol Dependence or Abuse	7.0%	6.7%	6.1%	6.4%
Needing But Not Receiving Treatment for Alcohol Use	6.6%	6.4%	5.9%	5.9%
United States	2004-05	2005-06	2006-07	2007-08
Alcohol Dependence	3.4%	3.4%	3.4%	3.5%
Alcohol Dependence or Abuse	7.7%	7.7%	7.6%	7.4%
Needing But Not Receiving Treatment for Alcohol Use	7.4%	7.3%	7.2%	7.0%

## Alcohol Risk and Protective Factors

### Access

**Indicator Description:** Risk and Protective factors measure how substance abuse begins and how it progresses. Risk factors can increase a person's chances for substance abuse, while protective factors can reduce the risk. Access to alcohol is a community risk factor. The more easily alcohol is available in a community, the greater risk that alcohol abuse will occur.

**Why Indicator is Important:** Understanding factors that increase a person's chances for substance abuse allows prevention specialists to focus on positive interventions that will achieve a positive population level change in substance abuse consumption. Understanding availability to obtain substances is an important piece in prevention interventions.

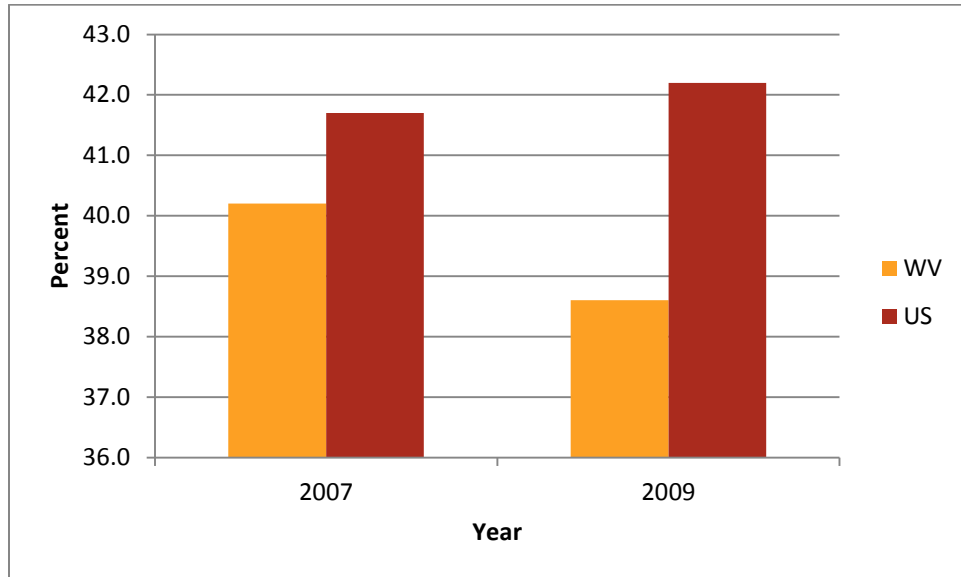
**Key Highlights:**

- Over 45% of females in West Virginia grades 9 through 12 reported obtaining alcohol they drank by someone giving it to them.

**Substance: Alcohol**

**Data Source: YRBSS**

***Students Grades 9 through 12 Reporting they Usually Obtained the Alcohol they drank by  
Someone Giving it to them***



West Virginia	2007	2009
Total	40.2%	38.6%
Female	51.1%	46.5%
Male	29.6%	30.9%
United States	2007	2009
Total	41.7%	42.2%
Female	49.7%	49.8%
Male	33.8%	35.0%
WV:US*	1.0	0.9

\*Ratio of WV relative to US; A score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rate

## Perception of Harm

**Indicator Description:** Risk and Protective factors measure how substance abuse begins and how it progresses. Risk factors can increase a person's chances for substance abuse, while protective factors can reduce the risk. An individual's perception of harm of drinking alcohol can influence one's decision to use alcohol. In families where parents abuse alcohol or are tolerant of children's use, the more likely they are to abuse alcohol as adolescents. The risk is further increased if a parent involves children in their own alcohol using behavior.

**Why Indicator is Important:** Understanding factors that increase a person's chances for substance abuse allows prevention specialists to focus on positive interventions that will achieve a positive population level change in substance abuse consumption. Understanding attitudes and beliefs is an important piece in prevention interventions.

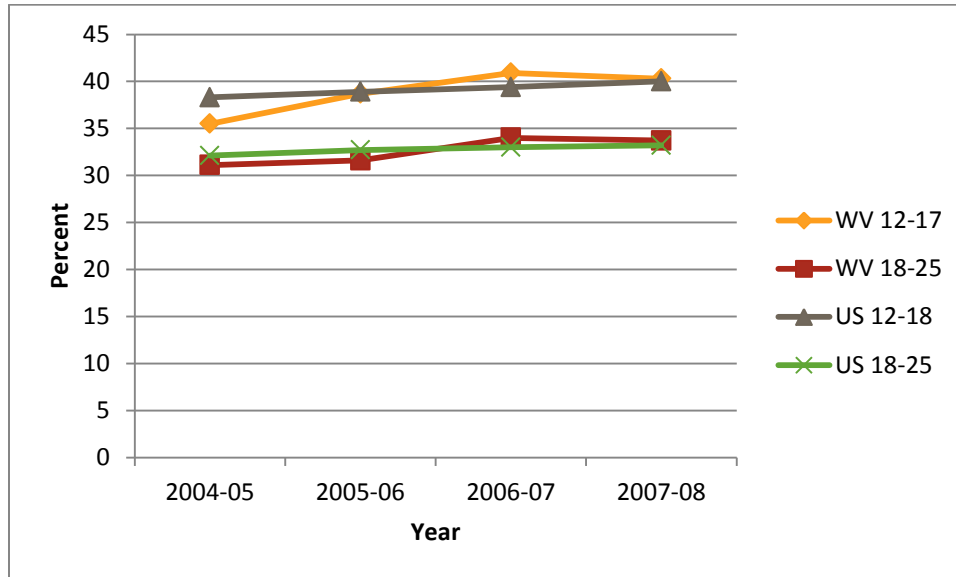
**Key Highlights:**

- Persons aged 18 to 25 years in West Virginia reported having the lowest perceived risk of having five or more drinks of an alcoholic beverage once or twice a week.
- An individual's perceived risk of having five or more drinks of an alcoholic beverage once or twice a week in West Virginia is comparable to that of the US average.

**Substance: Alcohol**

**Data Source: NSDUH**

**Perceptions of Great Risk of Having Five or More Drinks of an Alcoholic Beverage Once or Twice a Week**



West Virginia	2004-05	2005-06	2006-07	2007-08
Ages 12 thru 17	35.5%	38.7%	40.9%	40.3%
Ages 18 thru 25	31.1%	31.6%	34.0%	33.7%
Ages 26 and over	44.1%	47.3%	42.9%	42.2%
Total (%)	41.7%	44.6%	41.7%	41.8%
United States	2004-05	2005-06	2006-07	2007-08
Ages 12 thru 17	38.3%	38.9%	39.4%	40.0%
Ages 18 thru 25	32.1%	32.7%	33.0%	33.2%
Ages 26 and over	43.2%	43.6%	44.1%	43.7%
Total (%)	41.2%	41.7%	42.1%	41.9%
WV:US*	1.0	1.1	1.0	1.0

\*Ratio of WV relative to US; a score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates

Note: Estimates are based on a survey-weighted hierarchical Bayes estimation approach

## Tobacco Consumption

### Current Use

**Indicator Description:** Current cigarette use depicts the percentage of individuals who reported smoking cigarettes on at least one occasion in the past 30 days.

**Why Indicator is Important:** Smoking harms nearly every organ in your body. Smoking causes many diseases and reduces the health of smokers in general. According to the CDC, nearly 1 of every 5 deaths is caused by adverse health effects from cigarette smoking each year in the United States.

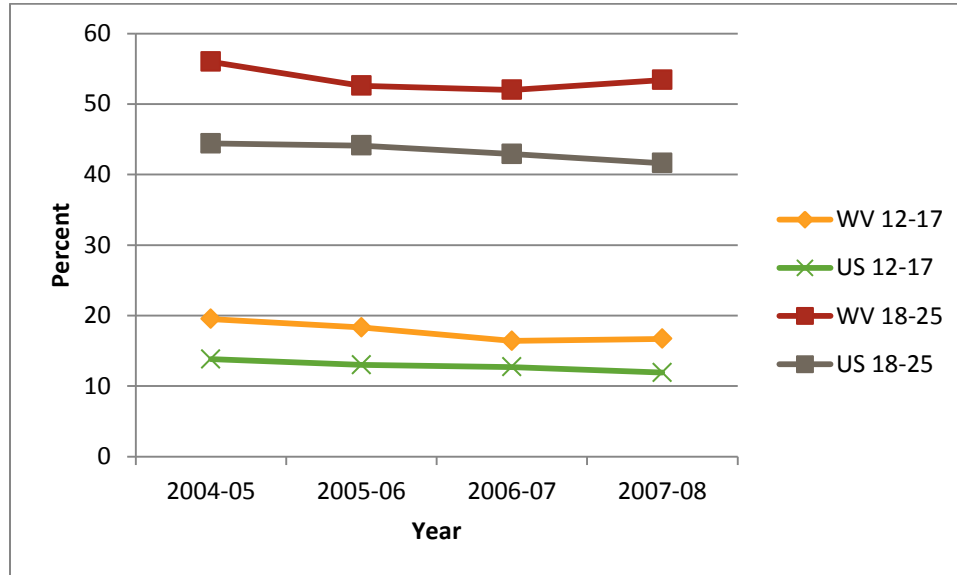
**Key Highlights:**

- In 2010, West Virginia had the highest percentage of adults smoking cigarettes in the US.
- West Virginians aged 18-25 have the highest prevalence of smoking at 53.4%.
- West Virginia ranked the 5<sup>th</sup> highest state in the nation for youth who reported smokeless tobacco use in 2009.
- West Virginia ranked the 8<sup>th</sup> highest state in the nation for youth who reported current cigarette use in 2009.

**Substance: Tobacco**

**Data Source: NSDUH**

**Persons Aged 12 and Older Reporting Any Use of Tobacco in the Past 30 Days**



West Virginia	2004-05	2005-06	2006-07	2007-08
Ages 12 thru 17	19.5%	18.3%	16.4%	16.7%
Ages 18 thru 25	56.0%	52.6%	52.0%	53.4%
Ages 26 and over	41.0%	41.3%	38.0%	36.5%
Total current Tobacco (%)	40.9%	40.6%	37.8%	36.7%
United States	2004-05	2005-06	2006-07	2007-08
Ages 12 thru 17	13.8%	13.0%	12.7%	11.9%
Ages 18 thru 25	44.4%	44.1%	42.9%	41.6%
Ages 26 and over	28.8%	29.2%	28.9%	28.4%
Total current Tobacco (%)	29.3%	29.5%	29.1%	28.5%
WV:US*	1.4	1.4	1.3	1.3

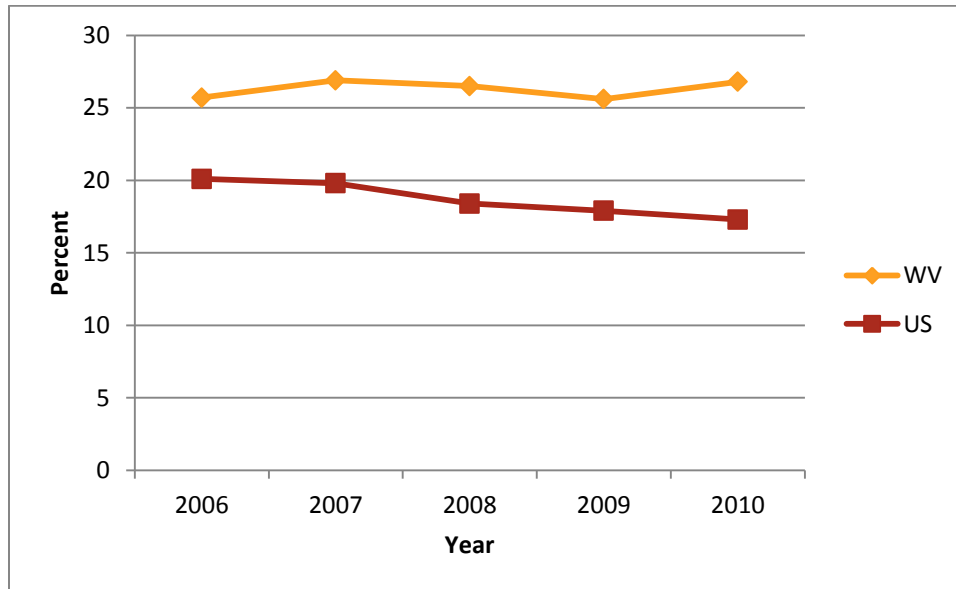
\*Ratio of WV relative to US; a score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates

Note: Estimates are based on a survey-weighted hierarchical Bayes estimation approach. Percentages are presented for the 2 years combined

**Substance: Tobacco**

**Data Source: BRFSS**

**Adults who are Current Smokers**



	2006	2007	2008	2009	2010
<b>WV</b>	25.7%	26.9%	26.5%	25.6%	26.8%
<b>US</b>	20.1%	19.8%	18.4%	17.9%	17.3%
<b>WV:US*</b>	<b>1.3</b>	<b>1.4</b>	<b>1.4</b>	<b>1.4</b>	<b>1.5</b>

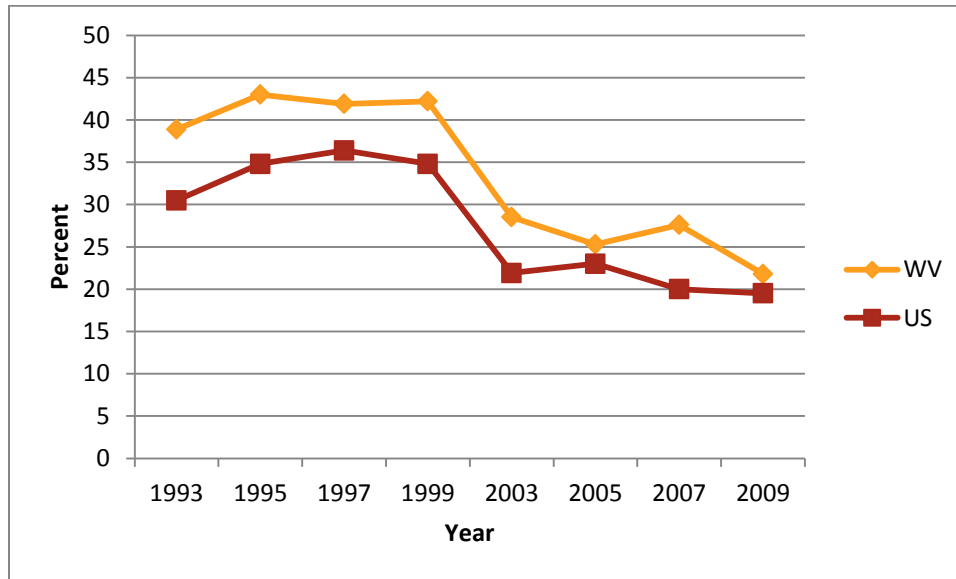
*\*Ratio of WV relative to US; a score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates*

	2006	2007	2008	2009	2010
<b>Gender</b>					
<b>Male</b>	25.4%	28.4%	26%	27.7%	28.3%
<b>Female</b>	26.1%	25.4%	27%	23.6%	25.4%
<b>Age</b>					
<b>18-24</b>	36.2%	34.9%	41.2%	30.7%	34.5%
<b>25-34</b>	34.3%	36.2%	38.7%	41.6%	36.8%
<b>35-44</b>	27.9%	33.1%	29.9%	26.9%	28.9%
<b>45-54</b>	26.7%	28.8%	27.9%	27.4%	32.4%
<b>55-64</b>	22.1%	22.2%	20.1%	21.7%	23.8%
<b>65+</b>	12.8%	11.5%	9.5%	10.7%	10.8%

**Substance: Tobacco**

**Data Source: YRBSS**

**Students Grades 9 through 12 Reporting Any Use of Cigarettes in the Past 30 Days**



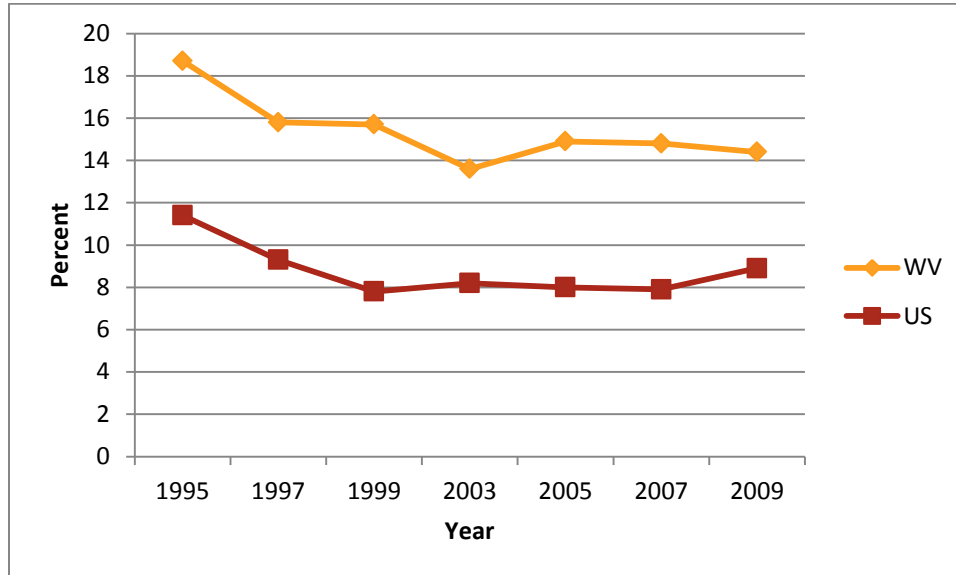
West Virginia	1993	1995	1997	1999	2003	2005	2007	2009
Total	38.9%	43.0%	41.9%	42.2%	28.5%	25.3%	27.6%	21.8%
Female	38.0%	42.5%	41.3%	43.7%	31.4%	24.8%	28.4%	22.2%
Male	39.7%	43.4%	42.4%	40.6%	25.6%	25.6%	26.7%	21.2%
United States	1993	1995	1997	1999	2003	2005	2007	2009
Total	30.5%	34.8%	36.4%	34.8%	21.9%	23.0%	20.0%	19.5%
Female	27.3%	31.2%	34.7%	34.9%	21.9%	23.0%	18.7%	19.1%
Male	27.6%	29.8%	35.4%	37.7%	21.8%	22.9%	21.3%	19.8%
WV:US*	1.3	1.2	1.2	1.9	1.3	1.1	1.4	1.1

\*Ratio of WV relative to US; a score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates

**Substance: Tobacco**

**Data Source: YRBSS**

**Students Grades 9 through 12 Reporting Any Use of Smokeless Tobacco in the Past 30 Days**



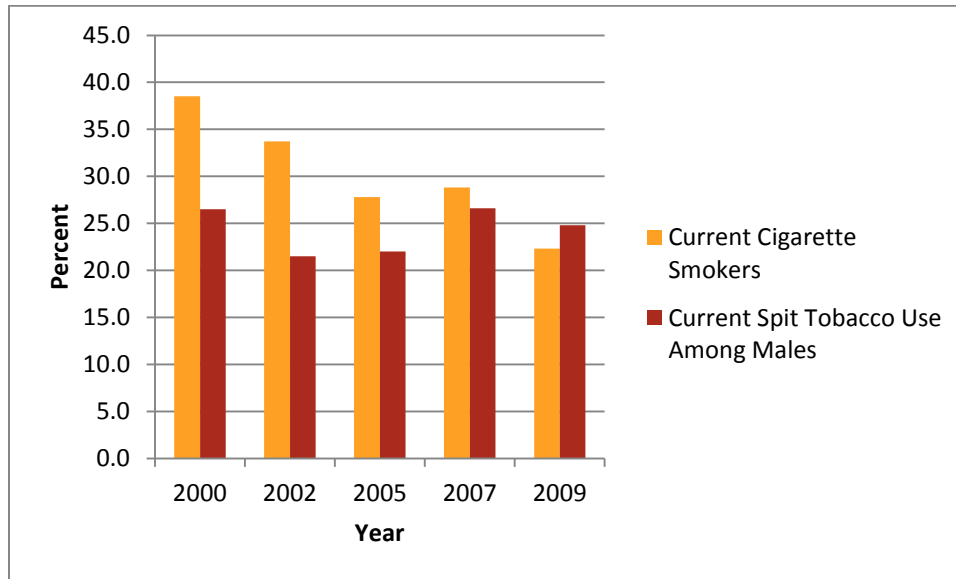
West Virginia	1995	1997	1999	2003	2005	2007	2009
Total	18.7%	15.8%	15.7%	13.6%	14.9%	14.8%	14.4%
Female	2.2%	1.3%	2.0%	3.3%	3.0%	2.2%	4.1%
Male	34.5%	31.0%	28.6%	23.3%	26.5%	27.0%	24.2%
United States	1995	1997	1999	2003	2005	2007	2009
Total	11.4%	9.3%	7.8%	8.2%	8.0%	7.9%	8.9%
Female	1.9%	1.5%	1.3%	2.2%	2.2%	2.3%	2.2%
Male	19.7%	15.8%	14.2%	11.0%	13.6%	13.4%	15.0%
WV:US*	1.6	1.7	1.6	1.7	1.9	1.8	1.6

\*Ratio of WV relative to US; a score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates

**Substance: Tobacco**

**Data Source: YTS**

**West Virginia Public High School Students Prevalence of Current Tobacco Users**



Youth (YTS): Public High School Students	2000	2002	2005	2007	2009
Current cigarette smokers (smoked on 1 or more days in the past 30 days)	38.5%	33.7%	27.8%	28.8%	22.3%
Current spit tobacco use among males (used on 1 or more days in the past 30 days)	26.5%	21.5%	22.0%	26.6%	24.8%

## Daily Use

**Indicator Description:** Daily cigarette use depicts the frequency of smoking among individuals within the past 30 days.

**Why Indicator is Important:** Tobacco is linked to several negative outcomes including cancer, cardiovascular disease, as well as death.

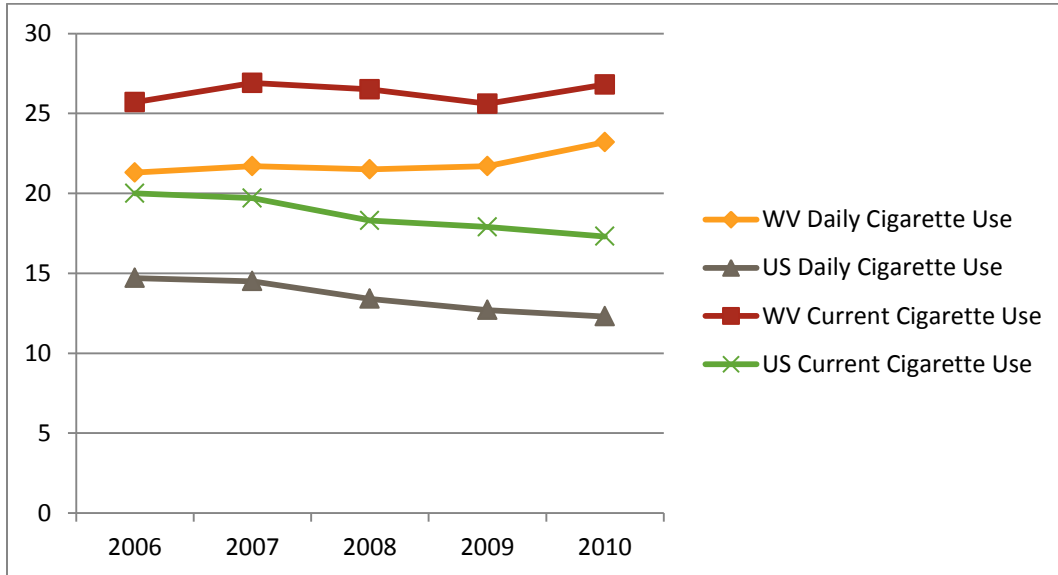
**Key Highlights:**

- In 2010, 26.8% of West Virginia adults reported being a current smoker while 23.2% reported daily cigarette use. Both rates have remained relatively unchanged since 2001.
- West Virginia ranked the 3rd highest state in the nation for youth who reported smoking at least 20 or more days within the past 30 days.
- West Virginia adults who reported daily cigarette use is almost double that of the national average in 2010.

**Substance: Tobacco**

**Data Source: BRFSS**

**Adults Reporting Cigarette Use**

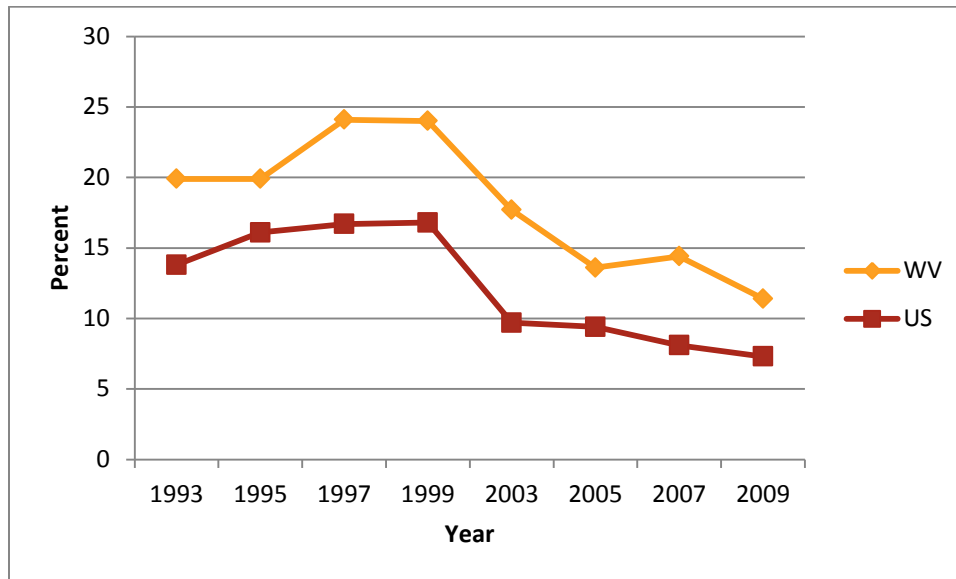


West Virginia	2006	2007	2008	2009	2010
Daily Cigarette Use	21.3%	21.7%	21.5%	21.7%	23.2%
Current Cigarette Use	25.7%	26.9%	26.5%	25.6%	26.8%
United States	2006	2007	2008	2009	2010
Daily Cigarette Use	14.7%	14.5%	13.4%	12.7%	12.3%
Current Cigarette Use	20.0%	19.7%	18.3%	17.9%	17.3%

**Substance: Tobacco**

**Data Source: YRBSS**

**Students Grades 9 through 12 who Report Smoking Cigarettes on 20 or More Days within the Past 30 Days**



West Virginia	1993	1995	1997	1999	2003	2005	2007	2009
<b>Total</b>	19.9%	19.9%	24.1%	24.0%	17.7%	13.6%	14.4%	11.4%
<b>Female</b>	20.4%	23.7%	23.4%	24.9%	19.3%	12.4%	14.5%	11.7%
<b>Male</b>	19.4%	25.5%	24.8%	22.9%	16.1%	14.6%	14.2%	11.0%
United States	1993	1995	1997	1999	2003	2005	2007	2009
<b>Total</b>	13.8%	16.1%	16.7%	16.8%	9.7%	9.4%	8.1%	7.3%
<b>Female</b>	13.5%	15.9%	15.7%	15.6%	9.7%	9.3%	7.4%	6.4%
<b>Male</b>	14.0%	16.3%	17.6%	17.9%	9.6%	9.3%	8.7%	8.0%
<b>WV:US*</b>	<b>1.4</b>	<b>1.2</b>	<b>1.4</b>	<b>1.4</b>	<b>1.8</b>	<b>1.4</b>	<b>1.8</b>	<b>1.6</b>

\*Ratio of WV relative to US; a score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates

## Age of Initial Use

**Indicator Description:** Smoking at an early age is associated with a greater increase of other risky behavior among teenagers. This indicator captures the percentage of students who reported their initial use of tobacco before the age of 13.

**Why Indicator is Important:** In order for prevention specialists to target youth tobacco prevention programs, they need to determine which age group is at highest risk. Early smoking initiation is also associated with increased risk of other substance use/abuse.

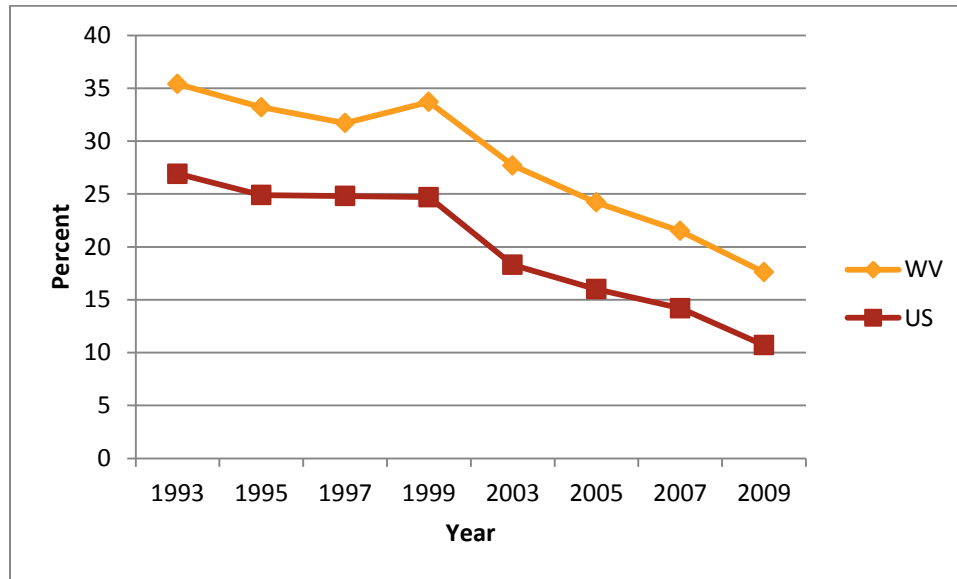
**Key Highlights:**

- Since 1999, West Virginia students reported an overall declining rate of initiating tobacco use before the age of 13.
- In 2009, females in West Virginia reported a significantly higher rate of initiating tobacco use before the age of 13 when compared nationally.

**Substance: Tobacco**

**Data Source: YRBSS**

**Students Grades 9 through 12 Initiating Tobacco use Before Age 13**



West Virginia	1993	1995	1997	1999	2003	2005	2007	2009
<b>Total</b>	35.4%	33.2%	31.7%	33.7%	27.7%	24.2%	21.5%	17.6%
<b>Female</b>	30.1%	28.3%	26.4%	27.9%	27.4%	22.0%	19.5%	15.2%
<b>Male</b>	40.4%	37.7%	37.2%	39.1%	28.1%	26.1%	23.4%	19.5%
United States	1993	1995	1997	1999	2003	2005	2007	2009
<b>Total</b>	26.9%	24.9%	24.8%	24.7%	18.3%	16.0%	14.2%	10.7%
<b>Female</b>	22.1%	23.2%	21.8%	22.1%	19.8%	16.4%	11.9%	9.4%
<b>Male</b>	30.1%	27.8%	28.0%	27.3%	20.0%	18.3%	16.4%	11.8%
<b>WV: US*</b>	<b>1.3</b>	<b>1.3</b>	<b>1.5</b>	<b>1.4</b>	<b>1.5</b>	<b>1.5</b>	<b>1.5</b>	<b>1.6</b>

\*Ratio of WV relative to US; a score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates

## Tobacco Use during Pregnancy

**Indicator Description:** Smoking during pregnancy is harmful to both the mother and baby. This indicator looks at the prevalence of smoking during the last 3 months of pregnancy.

**Why Indicator is Important:** According to the CDC, babies born to women who smoke during pregnancy are more likely to be born with birth defects such as a cleft lip or palate, prematurely, at a low birth weight, and are at high risk for other serious health conditions. Preconception education can reduce the percentage of women who are pregnant and smoking.

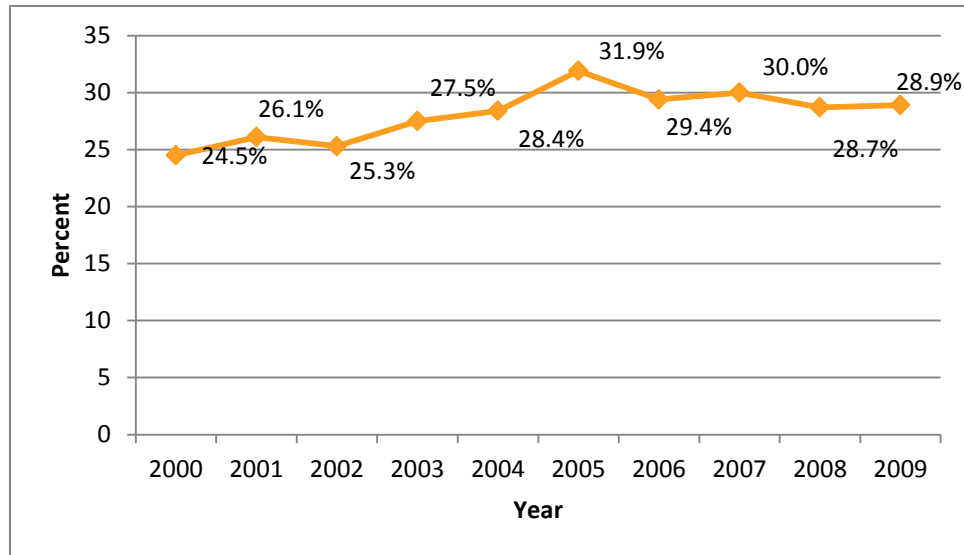
### Key Highlights:

- In 2009, women in West Virginia who were pregnant reported a higher incidence of smoking at 28.9% than the general population as a whole at 25.6%.
- In general, mothers who reported smoking during the last 3 months of pregnancy had a higher rate of infants born at a low birth weight when compared to those mothers who did not smoke during their pregnancy.
- In 2009, almost 40% of West Virginia women who reported smoking during the last 3 months of pregnancy were on Medicaid for their prenatal care and/or delivery payment.

**Substance: Tobacco**

**Data Source: PRAMS**

***Pregnant West Virginia Women Reporting Smoking during the Last Three Months of Pregnancy***



***Prevalence of Maternal Smoking the Last 3 Months of Pregnancy by NICU Infants***

	2005	2006	2007	2008	2009
Smoker	9.3%	11.0%	9.6%	12.2%	11.3%
Non-smoker	10.1%	9.9%	10.0%	11.2%	10.1%

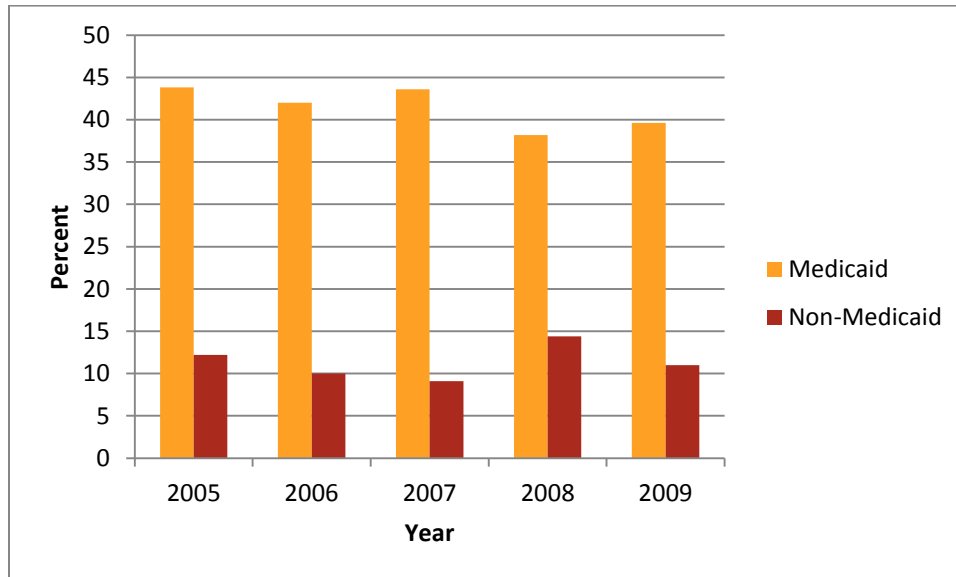
***Prevalence of Maternal Drinking the Last 3 Months of Pregnancy by Low Birth Weight (<2500 grams) Infants***

	2005	2006	2007	2008	2009
Smoker	12.4%	13.2%	12.4%	12.6%	12.7%
Non-smoker	6.8%	7.0%	7.0%	7.0%	6.3%

**Substance: Tobacco**

**Data Source: PRAMS**

***Prevalence of Maternal Smoking the Last 3 Months of Pregnancy by Medicaid for Prenatal  
Care and/or Delivery Payment***

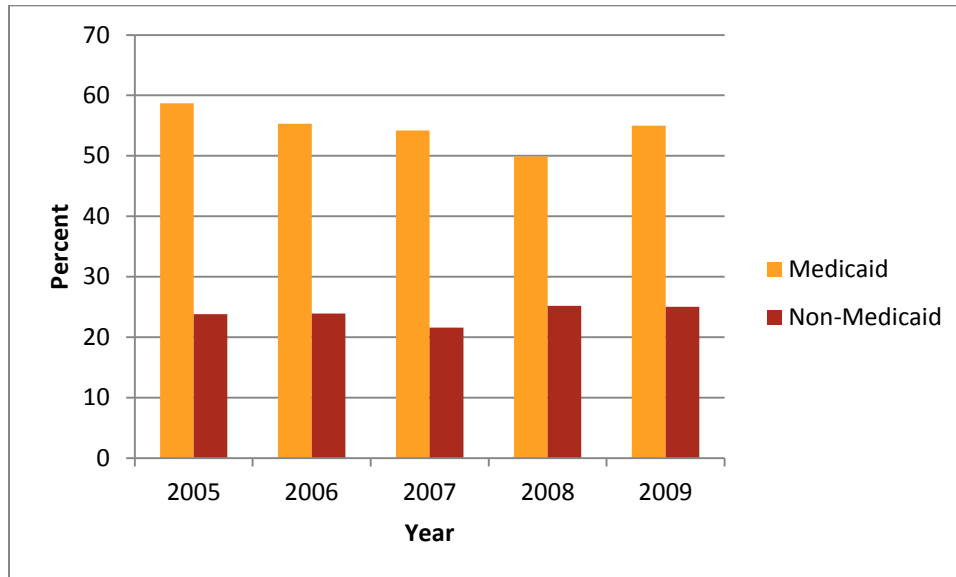


	2005	2006	2007	2008	2009
Medicaid	43.8%	42.0%	43.6%	38.2%	39.6%
Non-Medicaid	12.2%	10.0%	9.1%	14.4%	11.0%

**Substance: Tobacco**

**Data Source: PRAMS**

**Prevalence of Maternal Smoking 3 Months before Pregnancy  
by Medicaid Recipients for Prenatal Care**



	2005	2006	2007	2008	2009
Medicaid	58.7%	55.3%	54.2%	49.9%	55.0%
Non-Medicaid	23.8%	23.9%	21.6%	25.2%	25.0%

## Tobacco Consequences

### Tobacco-Related Mortality

**Indicator Description:** According to the CDC, there are more deaths caused each year by tobacco use than by all deaths from human immunodeficiency virus (HIV), illegal drug use, alcohol use, motor vehicle injuries, suicides, and murders combined. This section describes the negative health outcomes that are associated with tobacco use.

**Why Indicator is Important:** Measuring and tracking negative outcomes associated with tobacco consumption allows prevention specialists to measure the effectiveness of tobacco prevention and cessation programs. According to the US Surgeon General, tobacco use is the leading preventable cause of death in the United States. This indicator is important because West Virginia has one of the highest smoking prevalence rates in the United States and it is important to measure the consequences of tobacco consumption in order to focus prevention efforts to reduce this burden.

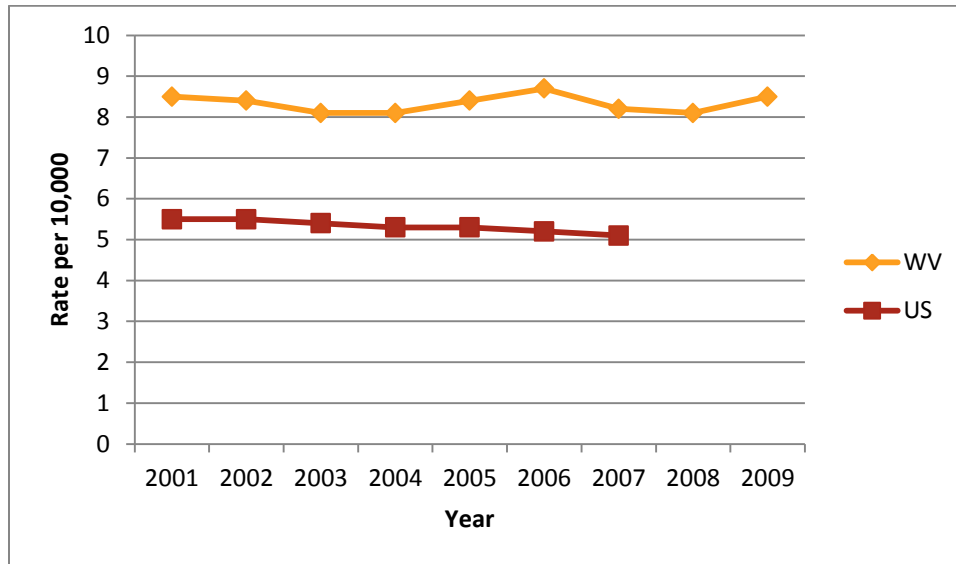
**Key Highlights:**

- West Virginia's death rate from lung, bronchus, and trachea cancer has remained steady since 2001 and is significantly higher than the US average rate.
- West Virginia continues to see a steady increase in chronic obstructive pulmonary disease (COPD) deaths with a rate of 8.2 deaths per 10,000 people in 2009.

**Substance: Tobacco**

**Data Source: HSC and CDC Wonder**

**Rate of Deaths from Lung/Bronchus/Trachea Cancer**



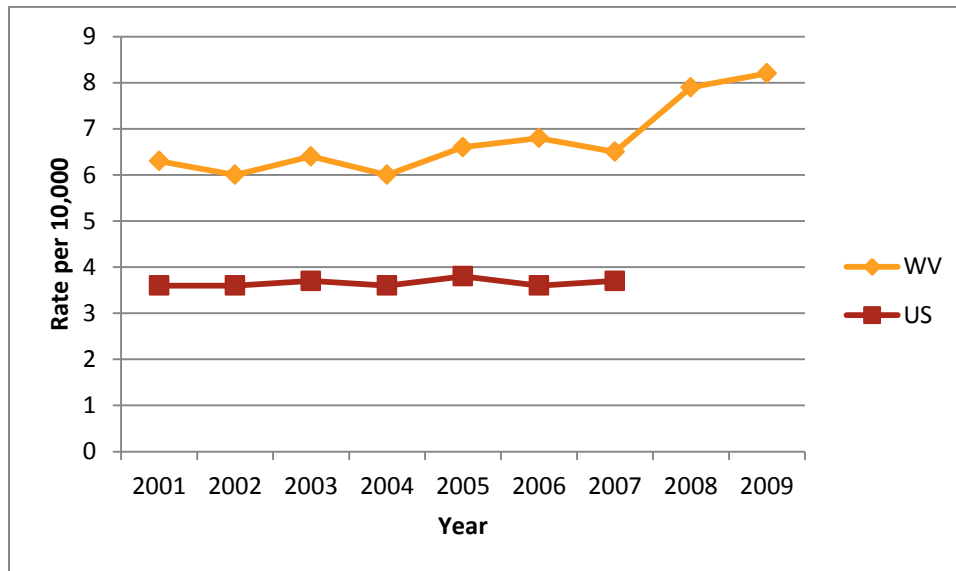
West Virginia	2001	2002	2003	2004	2005	2006	2007	2008	2009
Number of Deaths from Lung/Bronchus/Trachea Cancer	1,547	1,519	1,483	1,487	1,532	1,601	1,510	1,486	1,567
Rate per 10,000 population	8.5	8.4	8.1	8.1	8.4	8.7	8.2	8.1	8.5
United States	2001	2002	2003	2004	2005	2006	2007	2008	2009
Number of Deaths from Lung/Bronchus/Trachea Cancer	15,596	15,763	15,799	15,800	15,921	15,859	15,868	N/A	N/A
Rate per 10,000 population	5.5	5.5	5.4	5.3	5.3	5.2	5.1	N/A	N/A
WV:US*	2001	2002	2003	2004	2005	2006	2007	2008	2009
WV:US*	1.5	1.5	1.5	1.5	1.6	1.7	1.6	N/A	N/A

\*Ratio of WV relative to US; a score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates  
N/A Data not available

**Substance: Tobacco**

**Data Source: HSC and CDC Wonder**

**Rate of Deaths from Chronic Obstructive Pulmonary Disease (COPD)**



West Virginia	2001	2002	2003	2004	2005	2006	2007	2008	2009
Chronic Obstructive Pulmonary Disease (COPD)	1,134	1,093	1,169	1,102	1,201	1,256	1,197	1,458	1,508
Rate per 10,000	6.3	6.0	6.4	6.0	6.6	6.8	6.5	7.9	8.2
United States	2001	2002	2003	2004	2005	2006	2007	2008	2009
Chronic Obstructive Pulmonary Disease (COPD)	102,073	104,615	107,025	104,170	112,659	108,079	111,362	N/A	N/A
Rate per 10,000	3.6	3.6	3.7	3.6	3.8	3.6	3.7	N/A	N/A
	2001	2002	2003	2004	2005	2006	2007	2008	2009
WV:US*	1.8	1.7	1.7	1.7	1.7	1.9	1.8	N/A	N/A

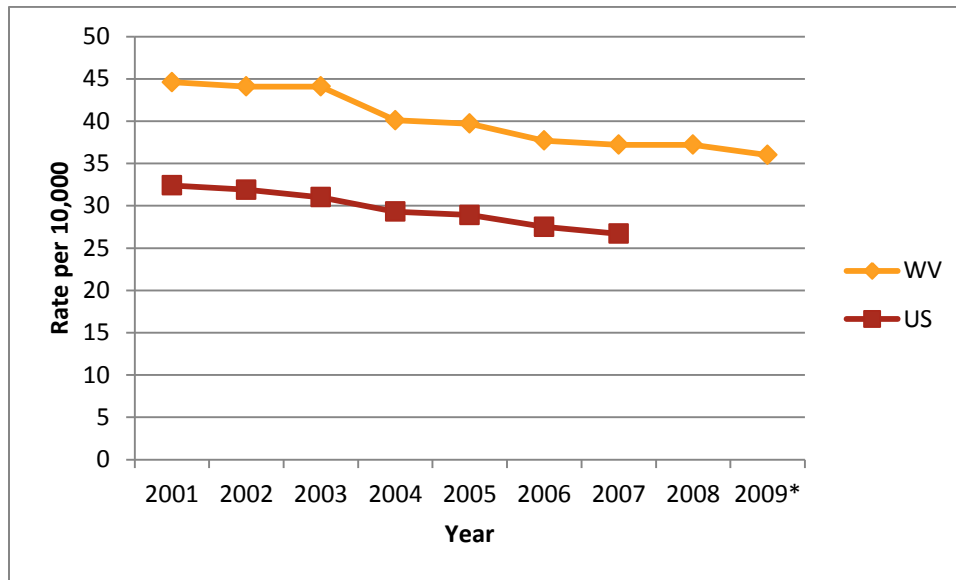
\*Ratio of WV relative to US; a score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates

Note: Not all COPD deaths are tobacco related. N/A Data not available

**Substance: Tobacco**

**Data Source: HSC and CDC Wonder**

**Rate of Deaths from Major Cardiovascular Disease**



West Virginia	2001	2002	2003	2004	2005	2006	2007	2008	2009
Major Cardiovascular Disease	8,078	8,008	8,035	7,379	7,260	6,909	6,846	6,857	6,646
Rate per 10,000	44.6	44.1	44.1	40.1	39.7	37.7	37.2	37.2	36.0
United States	2001	2002	2003	2004	2005	2006	2007	2008	2009
Major Cardiovascular Disease	922,334	918,628	902,443	861,190	856,030	823,746	806,156	N/A	N/A
Rate per 10,000	32.4	31.9	31.0	29.3	28.9	27.5	26.7	N/A	N/A
WV:US*	2001	2002	2003	2004	2005	2006	2007	2008	2009
WV:US*	1.4	1.4	1.4	1.4	1.4	1.4	1.4	N/A	N/A

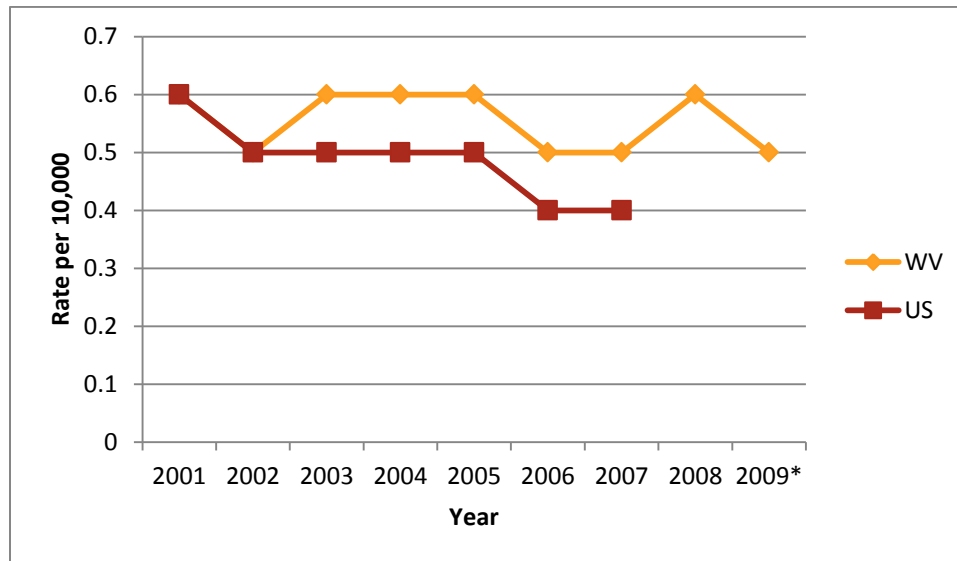
\*Ratio of WV relative to US; a score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates

Note: not all cardiovascular disease deaths are tobacco related. N/A Data not available

**Substance: Tobacco**

**Data Source: HSC and CDC Wonder**

**Rate of Deaths from Emphysema**



West Virginia	2001	2002	2003	2004	2005	2006	2007	2008	2009
Emphysema	114	99	101	111	111	97	98	114	89
Rate per 10,000	0.6	0.5	0.6	0.6	0.6	0.5	0.5	0.6	0.5
United States	2001	2002	2003	2004	2005	2006	2007	2008	2009
Emphysema	16,242	15,489	14,861	13,639	14,002	12,551	12,790	N/A	N/A
Rate per 10,000	0.6	0.5	0.5	0.5	0.5	0.4	0.4	N/A	N/A
	2001	2002	2003	2004	2005	2006	2007	2008	2009
WV:US*	1.0	1.0	1.2	1.2	1.2	1.3	1.3	N/A	N/A

\*Ratio of WV relative to US; a score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates

Note: not all deaths from emphysema are tobacco related. N/A Data not available

## Tobacco Risk and Protective Factors

### Access

**Indicator Description:** Risk and Protective factors measure how substance abuse begins and how it progresses. Risk factors can increase a person's chances for substance abuse, while protective factors can reduce the risk. Reducing youth access to tobacco products is crucial in reducing the percentage of youth who are smokers. With stricter laws, fewer youth are able to buy cigarettes, to become addicted and join a new generation of smokers.

**Why Indicator is Important:** Understanding factors that increase a person's chances for substance abuse allows prevention specialists to focus on positive interventions that will achieve a positive population level change in substance abuse consumption. Understanding attitudes and beliefs and availability to obtain substances is an important piece in prevention interventions. The retailer violation rate provides states a way to measure if the Synar requirements have contributed to a culture change in which youth tobacco is discouraged and the availability of tobacco to youth reduced.

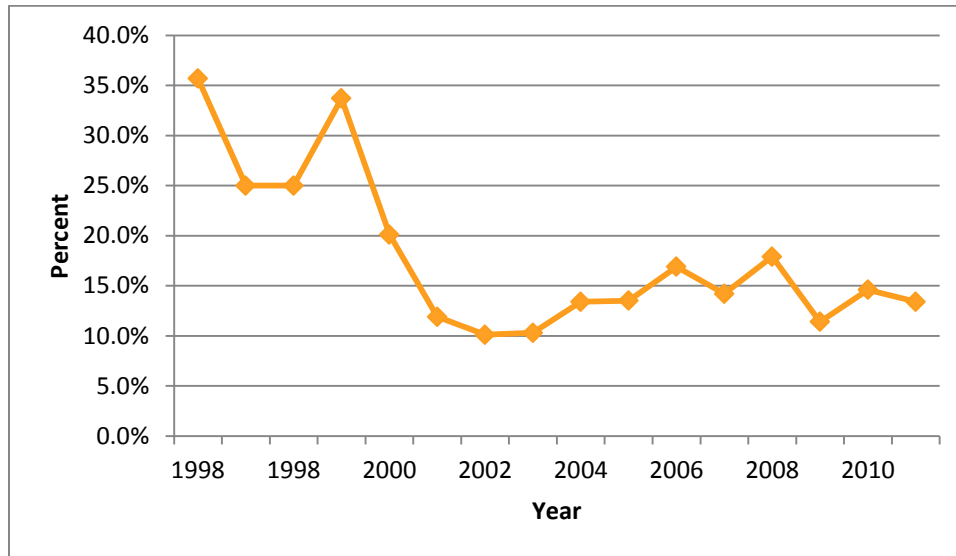
#### Key Highlights:

- West Virginia rates of underage cigarette use have consistently been among the highest in the country. However, West Virginia's success with the Synar Amendment has shown the rates for tobacco retailer noncompliance have been consistently below the target rate of 20% since 2001.
- Almost 40% of West Virginia's underage youth reported obtaining cigarettes by giving money to someone else to purchase as the most prevalent means to obtaining cigarettes.

**Substance: Tobacco**

**Data Source: SYNAR**

**West Virginia's SYNAR Retailer Violations**



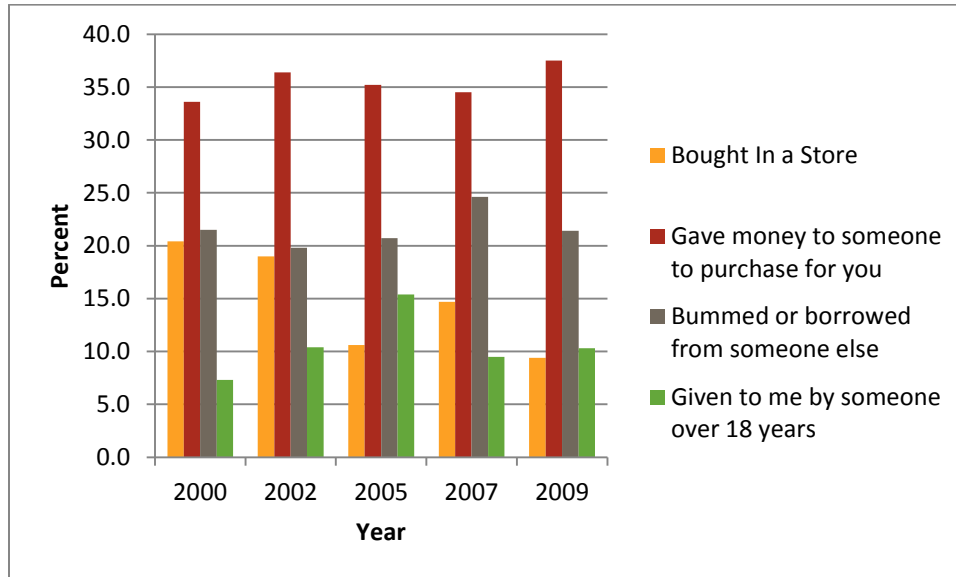
Year	Percent of Violation*
1997	35.7%
1998	25.0%
1999	33.7%
2000	20.1%
2001	11.9%
2002	10.1%
2003	10.3%
2004	13.4%
2005	13.5%
2006	16.9%
2007	14.2%
2008	17.9%
2009	11.4%
2010	14.6%
2011	13.4%

*\*States target for retailer non-compliance is 20% or less*

**Substance: Tobacco**

**Data Source: YTS**

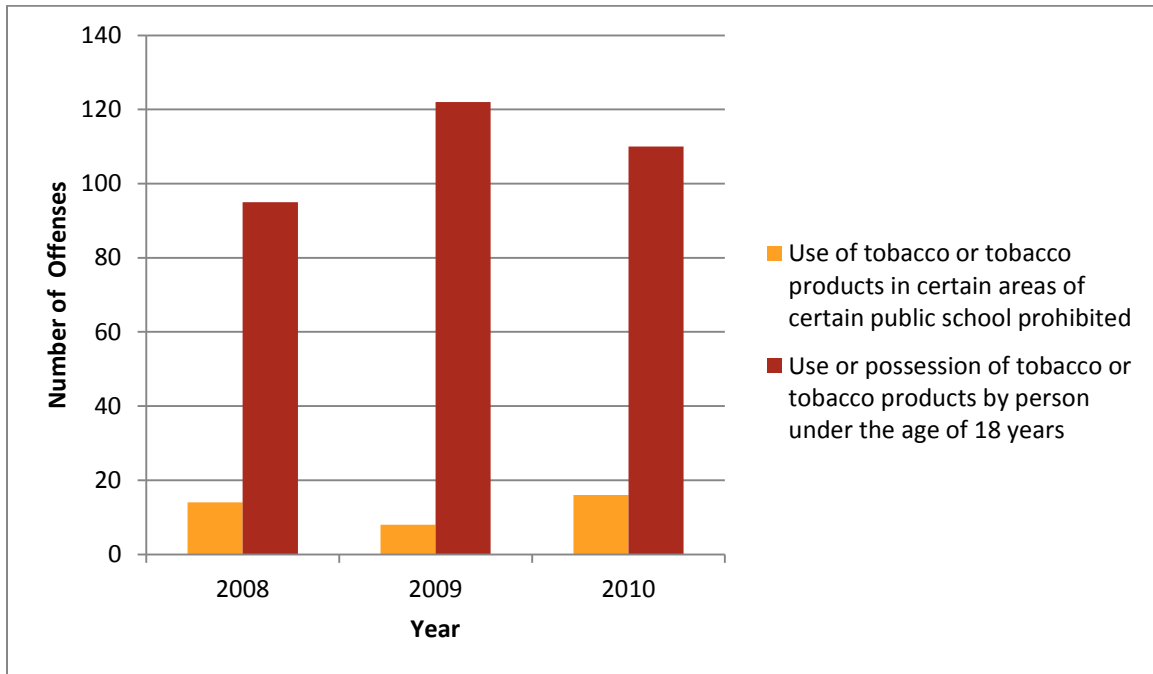
**West Virginia High School Students Source for Obtaining Cigarettes**



Source for students obtaining cigarettes:	2000	2002	2005	2007	2009
Bought them in a store	20.4%	19.0%	10.6%	14.7%	9.4%
Gave money to someone to purchase for you	33.6%	36.4%	35.2%	34.5%	37.5%
Borrowed or bummed from someone else	21.5%	19.8%	20.7%	24.6%	21.4%
Cigarettes were given to me by someone over 18	7.3%	10.4%	15.4%	9.5%	10.3%

**Substance: Tobacco**

**Data Source: WV Centralized Juvenile Probation Data System**



	2008	2009	2010
Use of tobacco or tobacco products in certain areas of public school	14	8	16
Use or possession of tobacco or tobacco products by person under the age of 18 years	95	122	110
Total Tobacco-Related Juvenile Offenses	109	130	126

## Perception of Harm

**Indicator Description:** Risk and Protective factors measure how substance abuse begins and how it progresses. Risk factors can increase a person's chances for substance abuse, while protective factors can reduce the risk. Perception of harm is a person's concern about the negative effects tobacco has on them.

**Why Indicator is Important:** Understanding factors that increase a person's chances for substance abuse allows prevention specialists to focus on positive interventions that will achieve a positive population level change in substance abuse consumption. Measuring the perception of tobacco use as a high risk activity provides data that can be used to target tobacco prevention activities.

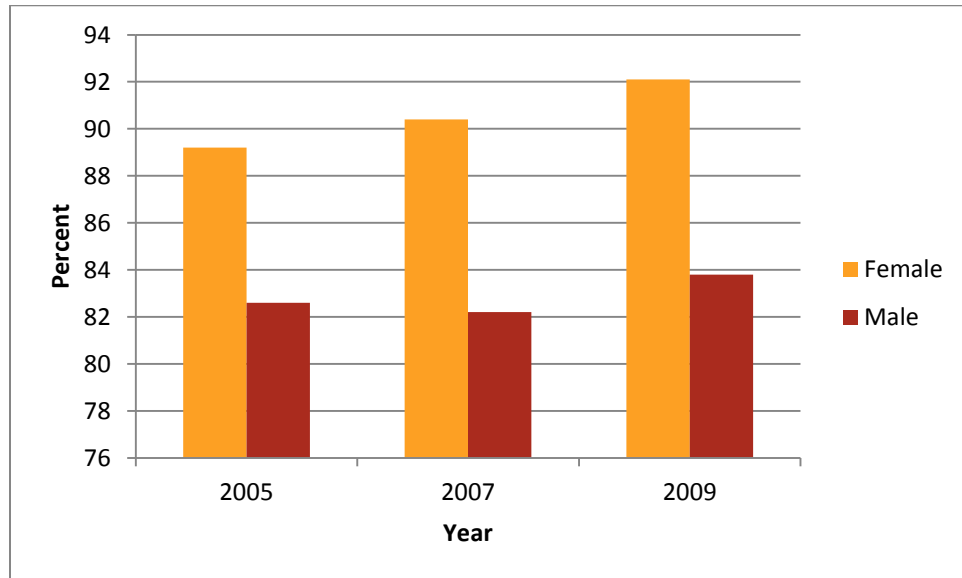
**Key Highlights:**

- West Virginia females have a greater perceived risk from smoking cigarettes compared to males in all high school grade levels.

**Substance: Tobacco**

**Data Source: YTS**

**High School Students Who Currently Smoke and Think Young People Risk Harming Themselves  
if they Smoke between 1 and 5 Cigarettes per Day**



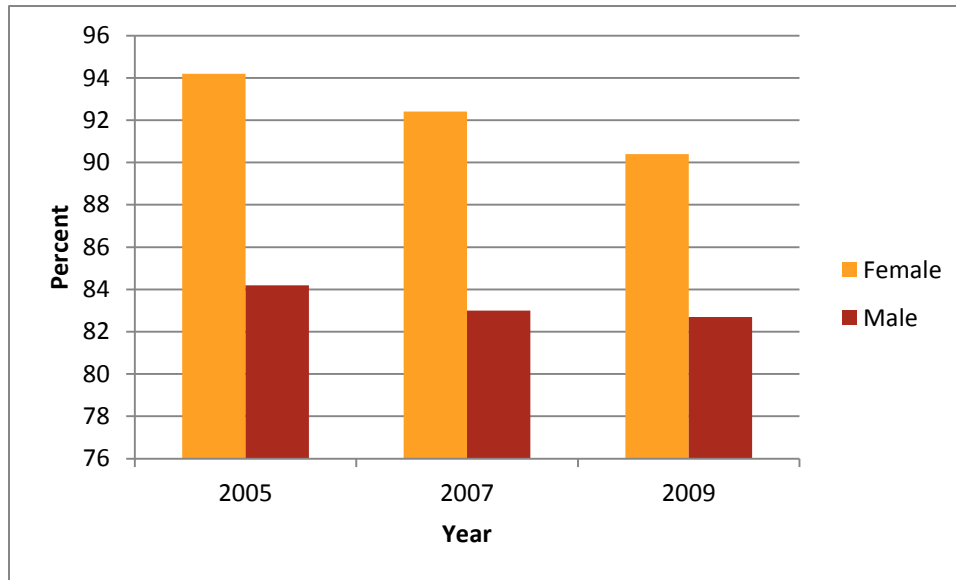
Note: Y axis does not start at 0.

	Total	Female	Male	9th	10th	11th	12th
2005	85.8%	89.2%	82.6%	79.5%	84.4%	91.7%	88.8%
2007	84.6%	90.4%	82.2%	75.1%	93.6%	82.9%	86.1%
2009	87.7%	92.1%	83.8%	82.2%	89.6%	92.2%	85.6%

**Substance: Tobacco**

**Data Source: YTS**

***High School Students Who Think the Smoke from Other People's Cigarettes  
Is Harmful to Them***



Note: Y axis does not start at 0.

	Total	Female	Male	9th	10th	11th	12th
2005	89.1%	94.2%	84.2%	88.2%	88.9%	90.8%	89.2%
2007	86.3%	92.4%	83.0%	80.5%	89.2%	86.8%	88.1%
2009	86.3%	90.4%	82.7%	89.9%	84.5%	86.2%	85.9%

## Drug Consumption

### Current Use

**Indicator Description:** The following section describes drug consumption by youths and adults in West Virginia.

**Why Indicator is Important:** In order to assess what drugs are a problem in West Virginia, we need to look at what is being consumed and by whom it is being consumed. Dangers of drug use include neurological incidents, increased risk of accidents, an increased risk of AIDS and other STDs, psychological distress, and damage to the respiratory, reproductive and immune systems, just to name a few. Socially, drugs impact performance in school, relationships, and can bring about significant legal consequences and financial impacts.

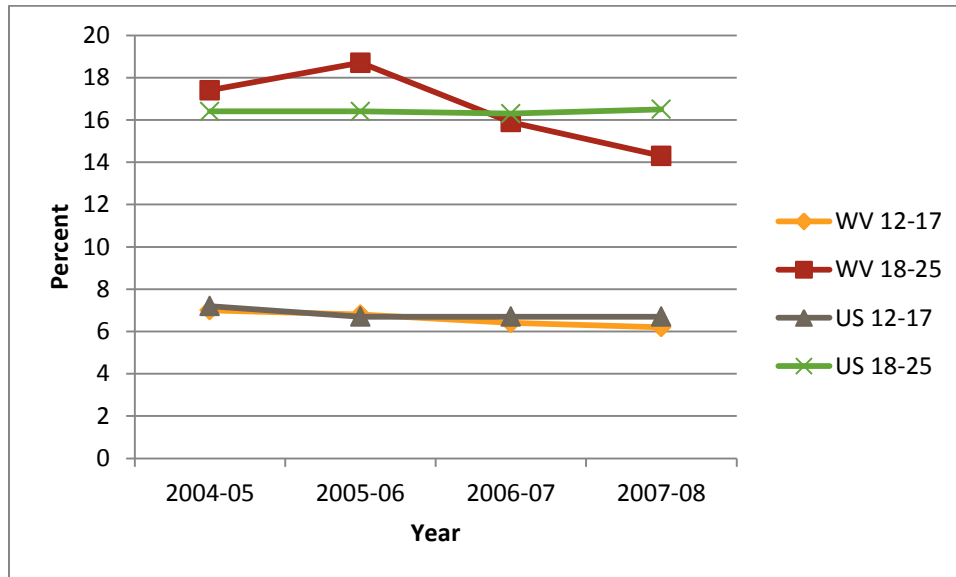
**Key Highlights:**

- West Virginians 18-25 years of age report the highest prevalence of any illicit drug consumption other than marijuana within the past 30 days compared to any other age group.
- Although West Virginia youth have reported a steady decline of marijuana use since 1999, the prevalence of marijuana use is considerably higher than the national average.
- West Virginians have reported a significant decline in cocaine use since 2007.

**Substance: Drugs**

**Data Source: NSDUH**

**Persons Aged 12 and Older Reporting Any Use of Marijuana in the Past 30 Days**



West Virginia	2004-05	2005-06	2006-07	2007-08
Ages 12 thru 17	7.0%	6.8%	6.4%	6.2%
Ages 18 thru 25	17.4%	18.7%	15.9%	14.3%
Ages 26 and over	3.9%	3.9%	3.5%	3.3%
Total Marijuana Use (%)	5.8%	6.0%	5.3%	4.8%
United States	2004-05	2005-06	2006-07	2007-08
Ages 12 thru 17	7.2%	6.7%	6.7%	6.7%
Ages 18 thru 25	16.4%	16.4%	16.3%	16.5%
Ages 26 and over	4.1%	4.1%	4.2%	4.1%
Total Marijuana Use (%)	6.0%	6.0%	5.9%	5.6%
WV:US*	1.0	1.0	0.9	1.0

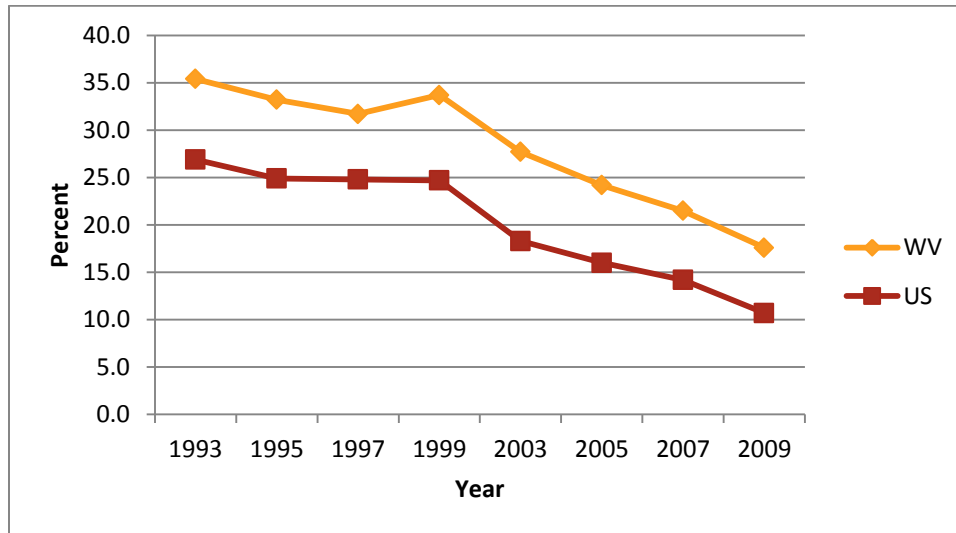
\*Ratio of WV relative to US; a score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates

Note: Estimates are based on a survey-weighted hierarchical Bayes estimation approach. Percentages are presented for the 2 years combined.

**Substance: Drugs**

**Data Source: YRBSS**

**Students Grades 9 through 12 Reporting Any Use of Marijuana in the Past 30 Days**



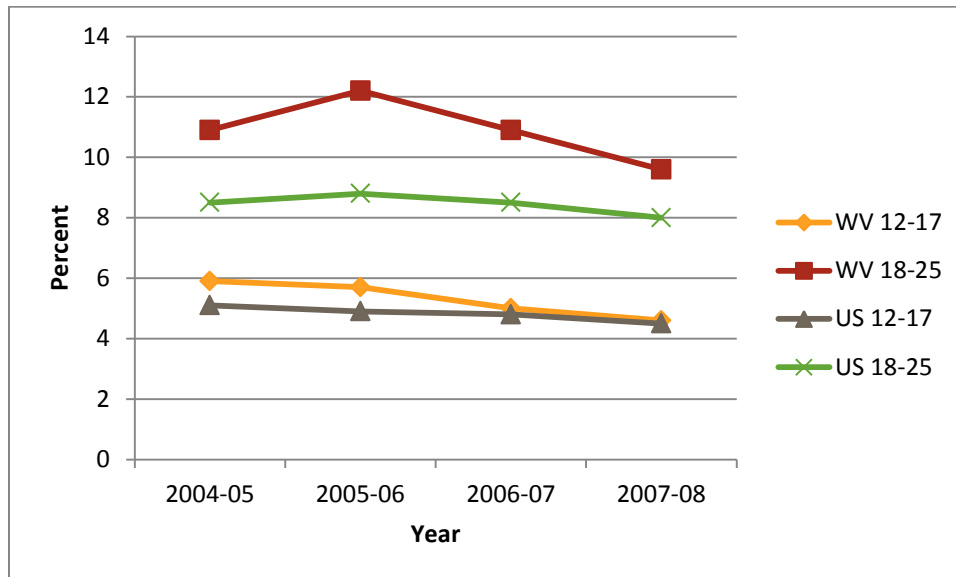
West Virginia	1993	1995	1997	1999	2003	2005	2007	2009
<b>Total</b>	35.4%	33.2%	31.7%	33.7%	27.7%	24.2%	21.5%	17.6%
<b>Female</b>	30.1%	28.3%	26.4%	27.9%	27.4%	22.0%	19.5%	15.2%
<b>Male</b>	40.4%	37.7%	37.2%	39.1%	28.1%	26.1%	23.4%	19.5%
United States	1993	1995	1997	1999	2003	2005	2007	2009
<b>Total</b>	26.9%	24.9%	24.8%	24.7%	18.3%	16.0%	14.2%	10.7%
<b>Female</b>	22.1%	23.2%	21.8%	22.1%	19.8%	16.4%	11.9%	9.4%
<b>Male</b>	30.1%	27.8%	28.0%	27.3%	20.0%	18.3%	16.4%	11.8%
<b>WV:US*</b>	<b>1.3</b>	<b>1.3</b>	<b>1.3</b>	<b>1.4</b>	<b>1.5</b>	<b>1.5</b>	<b>1.5</b>	<b>1.6</b>

\*Ratio of WV relative to US; A score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates

**Substance: Drugs**

**Data Source: NSDUH**

**Individuals Reporting Use of Any Illicit Drug other than Marijuana, or an Abusable Product  
that can be Obtained Legally in the Past 30 Days**



West Virginia		2004-05	2005-06	2006-07	2007-08
Ages 12 thru 17		5.9	5.7	5.0	4.6
Ages 18 thru 25		10.9	12.2	10.9	9.6
Ages 26 and over		2.6	2.8	3.1	2.9
Total Past Use of Illicit Drug Other Than Marijuana (%)		4.0	4.2	4.2	3.8
United States		2004-05	2005-06	2006-07	2007-08
Ages 12 thru 17		5.1	4.9	4.8	4.5
Ages 18 thru 25		8.5	8.8	8.5	8.0
Ages 26 and over		2.0	2.8	2.9	2.7
Total Past Use of Illicit Drug Other Than Marijuana (%)		2.5	3.8	3.8	3.6
WV:US**		1.6	1.1	1.1	1.1

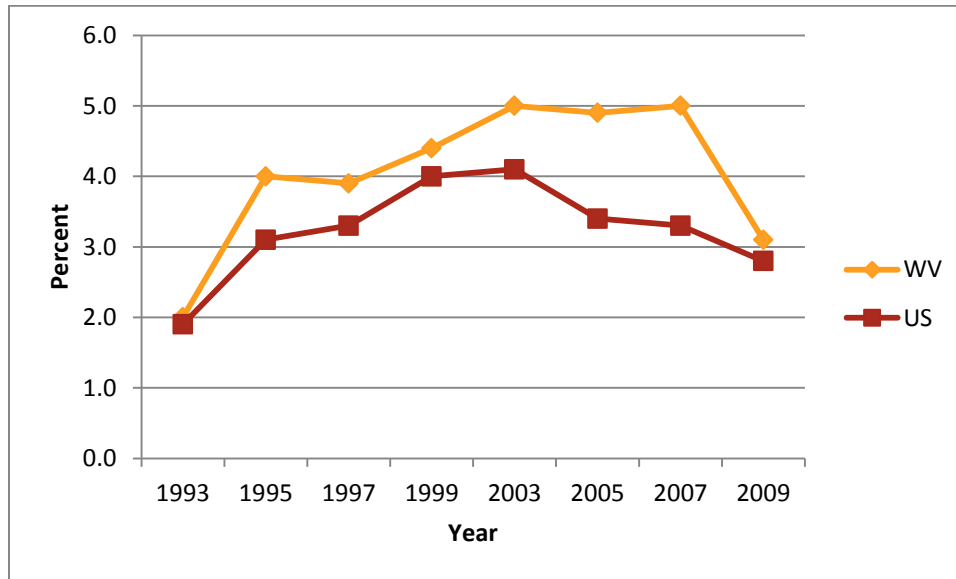
\*Ratio of WV relative to US; A score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates

Note: Estimates are based on a survey-weighted hierarchical Bayes estimation approach. Percentages are presented for the 2 years combined.

**Substance: Drugs**

**Data Source: YRBSS**

**Students in Grades 9 through 12 Reporting the Use of Cocaine in the Past 30 Days**



West Virginia	1993	1995	1997	1999	2003	2005	2007	2009
Total	2.0%	4.0%	3.9%	4.4%	5.0%	4.9%	5.0%	3.1%
Female	0.9%	2.2%	2.6%	2.6%	5.4%	4.2%	5.3%	2.2%
Male	3.0%	5.7%	5.4%	6.0%	4.7%	5.7%	4.6%	3.6%
United States	1993	1995	1997	1999	2003	2005	2007	2009
Total	1.9%	3.1%	3.3%	4.0%	4.1%	3.4%	3.3%	2.8%
Female	1.4%	1.8%	2.4%	2.9%	3.5%	2.8%	2.5%	2.0%
Male	2.3%	4.3%	4.0%	5.2%	4.6%	4.0%	4.0%	3.5%
WV:US*	1.1	1.3	1.2	1.1	1.2	1.4	1.5	1.1

\*Ratio of WV relative to US; A score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates

**Substance: Drugs**

**Data Source: West Virginia Poison Control**

***Incidence of Cocaine Exposures Reported to the WV Poison Center***

	2006	2007	2008	2009	2010
<b>Cocaine Exposures</b>	108	72	51	40	31
<b>5 Years</b>	1	0	3	1	1
<b>6-12 Years</b>	0	0	0	0	0
<b>13-19 Years</b>	8	5	5	3	0
<b>&gt;=20 Years</b>	99	67	43	36	30
<b>Seen in a Healthcare Facility</b>	98	61	45	35	28
<b>Minor to Moderate Effect</b>	76	54	34	31	20
<b>Major Effect</b>	13	4	5	2	1
<b>Death</b>	2	2	3	2	1

***Incidence of Heroin Exposures Reported to the WV Poison Center***

	2006	2007	2008	2009	2010
<b>Heroin Exposures</b>	14	12	24	23	13
<b>&gt;=5 Years</b>	0	0	0	0	0
<b>6-12 Years</b>	0	0	0	0	0
<b>13-19 Years</b>	3	2	3	2	0
<b>&gt;=20 Years</b>	11	10	21	21	13
<b>Seen in a Healthcare Facility</b>	13	10	22	20	11
<b>Minor to Moderate Effect</b>	8	7	15	14	7
<b>Major Effect</b>	4	2	3	3	1
<b>Death</b>	1	0	2	1	1

Note: Exposures are limited to only those that are directly reported to WV Poison Center. Values displayed are based on intake and follow up of the WV Poison Center staff; not all subcategories are reported for every exposure.

***Incidence of Methamphetamine Exposures Reported to the WV Poison Center***

	2006	2007	2008	2009	2010
<b>Methamphetamine Exposures</b>	4	8	13	19	16
<b>&gt;=5 Years</b>	0	0	1	4	1
<b>6-12 Years</b>	1	0	1	1	0
<b>13-19 Years</b>	0	1	1	1	3
<b>&gt;=20 Years</b>	3	7	10	13	12
<b>Seen in a Healthcare Facility</b>	4	7	9	11	11
<b>Minor to Moderate Effect</b>	1	7	5	6	9
<b>Major Effect</b>	0	0	3	1	0
<b>Death</b>	0	0	0	0	0

***Incidence of Marijuana Exposures Reported to the WV Poison Center***

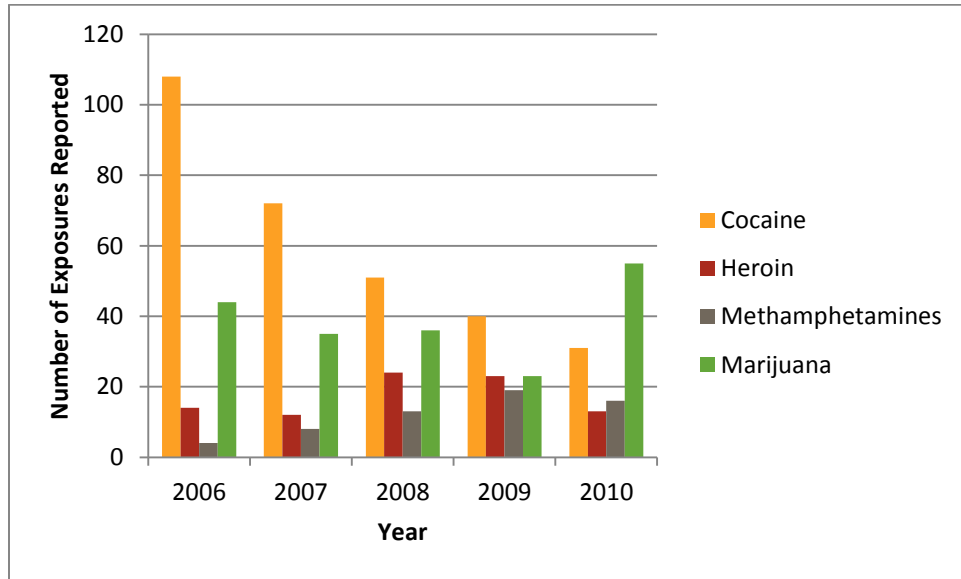
	2006	2007	2008	2009	2010
<b>Marijuana Exposures</b>	44	35	36	23	55
<b>&gt;=5 Years</b>	1	1	1	0	2
<b>6-12 Years</b>	2	0	0	0	0
<b>13-19 Years</b>	10	14	12	12	17
<b>&gt;=20 Years</b>	31	20	23	11	36
<b>Seen in a Healthcare Facility</b>	38	28	31	17	47
<b>Minor to Moderate Effect</b>	37	23	28	15	41
<b>Major Effect</b>	1	3	0	2	4
<b>Death</b>	2	0	0	0	0

***Incidence of Opioid Exposures Reported to the WV Poison Center***

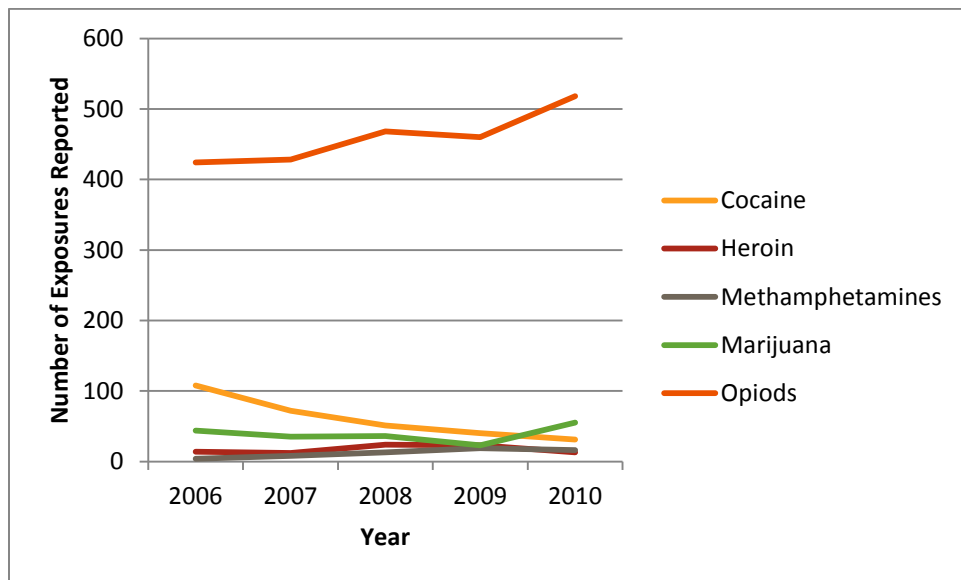
	2006	2007	2008	2009	2010
<b>Opioid Exposures</b>	424	428	468	460	518
<b>&gt;=5 Years</b>	40	44	64	67	60
<b>6-12 Years</b>	4	11	14	2	4
<b>13-19 Years</b>	32	44	47	46	35
<b>&gt;=20 Years</b>	351	334	349	356	427
<b>Seen in a Healthcare Facility</b>	313	278	321	320	399
<b>Minor to Moderate Effect</b>	98	106	142	150	169
<b>Major Effect</b>	46	39	29	39	42
<b>Death</b>	7	5	13	11	4

Note: Exposures are limited to only those that are directly reported to WV Poison Center. Values displayed are based on intake and follow up of the WV Poison Center staff; not all subcategories are reported for every exposure.

### ***Street Drug Exposures Reported to the WV Poison Control***



### ***Drug Exposures Reported to the WV Poison Control***



## Lifetime Use

**Indicator Description:** The following section describes lifetime drug consumption of youths and adults in West Virginia. There are a variety of drug classes from typical street drugs like ecstasy and heroin to more common drugs like marijuana. Prescription drug use and inhalants are also being seen as a preferred drug of choice for abuse.

**Why Indicator is Important:** In order to assess what drugs are a problem in West Virginia, we need to look at what is being consumed and by whom it is being consumed. Only then can prevention specialists begin to focus on reducing the negative health and social impacts that drugs have on a person and society.

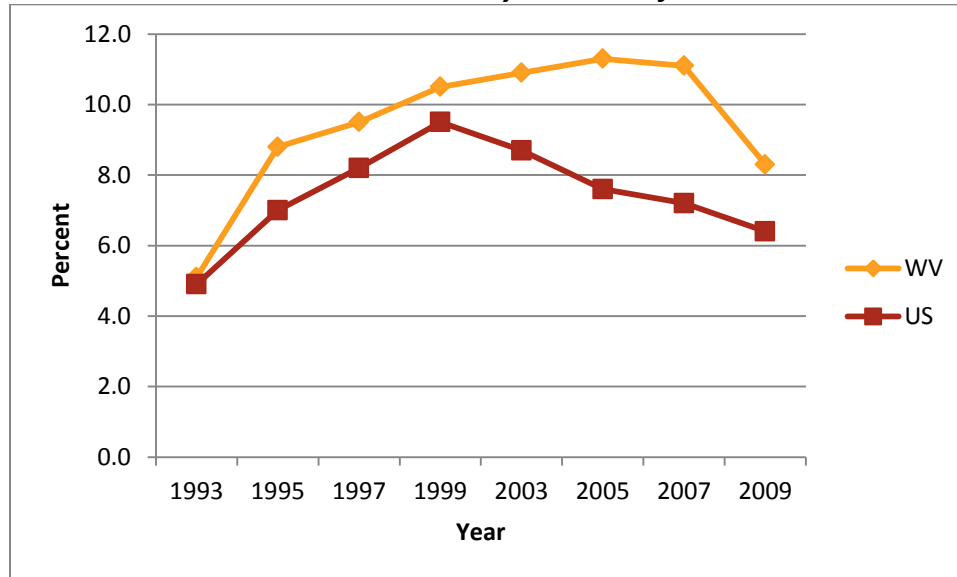
### Key Highlights:

- West Virginia students grades 9 through 12 reported a steady increase in heroin use on at least one or more times during their lifetime since 2005.
- West Virginia students grades 9 through 12 reported a steady increase in the use of needles to inject any illegal drug into their body on at least one or more times during their lifetime.
- West Virginia has the highest annual per capita retail prescription drugs filled at pharmacies nationwide.
- The West Virginia Prescription Drug Abuse Quitline reported in 2010 that 73% of the calls they received were for abuse of Opioids.

**Substance: Drugs**

**Data Source: YRBSS**

**Students in Grades 9 through 12 Reporting the Use of Cocaine  
On One or More Days in their Lifetime**



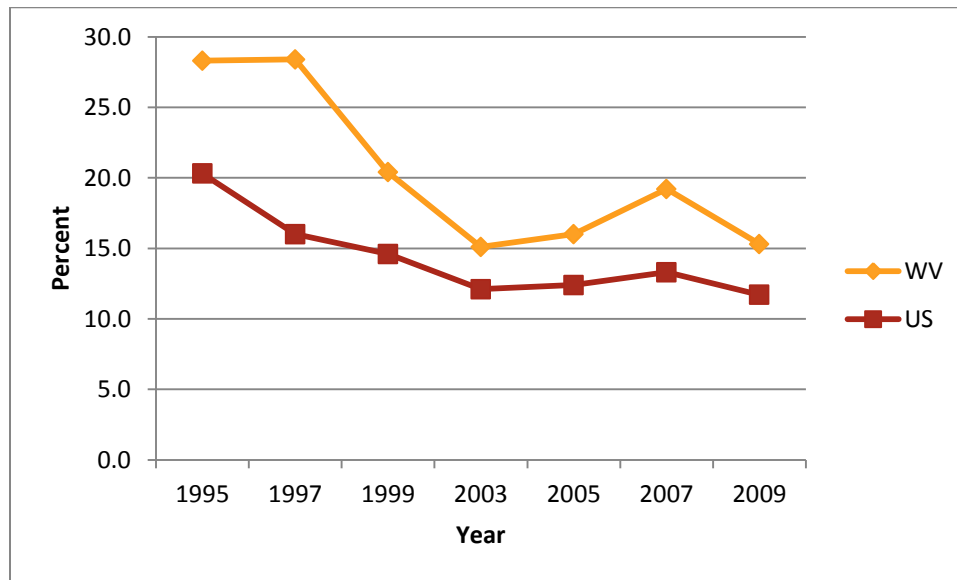
West Virginia	1993	1995	1997	1999	2003	2005	2007	2009
Total	5.1%	8.8%	9.5%	10.5%	10.9%	11.3%	11.1%	8.3%
Female	3.9%	5.9%	7.8%	8.8%	12.1%	10.8%	10.2%	7.0%
Male	6.4%	11.4%	11.3%	12.1%	9.8%	11.5%	11.8%	9.2%
United States	1993	1995	1997	1999	2003	2005	2007	2009
Total	4.9%	7.0%	8.2%	9.5%	8.7%	7.6%	7.2%	6.4%
Female	4.2%	5.0%	7.2%	8.4%	7.7%	6.8%	6.5%	5.3%
Male	5.5%	8.8%	9.1%	10.7%	9.5%	8.4%	7.8%	7.3%
WV:US*	1.0	1.3	1.2	1.1	1.3	1.5	1.5	1.3

\*Ratio of WV relative to US; A score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates

**Substance: Drugs**

**Data Source: YRBSS**

***Students Grades 9 through 12 Ever Sniffing Glue, Breathed the Contents of Aerosol Spray Cans, or Inhaled Any Paint Sprays to Get High on One or More Times during Their Life***



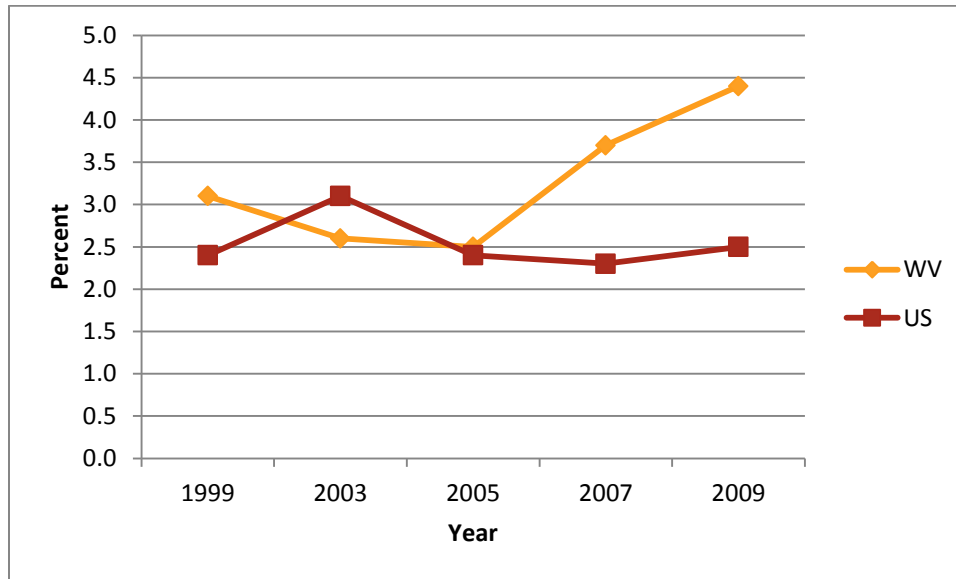
West Virginia	1995	1997	1999	2003	2005	2007	2009
Total	28.3%	28.4%	20.4%	15.1%	16.0%	19.2%	15.3%
Female	24.2%	26.4%	19.6%	15.2%	17.5%	22.0%	16.2%
Male	32.1%	30.6%	21.2%	15.1%	14.5%	16.2%	13.7%
United States	1995	1997	1999	2003	2005	2007	2009
Total	20.3%	16.0%	14.6%	12.1%	12.4%	13.3%	11.7%
Female	18.4%	14.1%	14.6%	11.4%	13.5%	14.3%	12.9%
Male	22.1%	17.6%	14.7%	12.6%	11.3%	12.4%	10.6%
WV:US*	1.4	1.8	1.4	1.2	1.3	1.4	1.3

\*Ratio of WV relative to US; A score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates

**Substance: Drugs**

**Data Source: YRBSS**

**Students Grades 9 through 12 Reporting Using Heroin on One or More Times during Their Life**



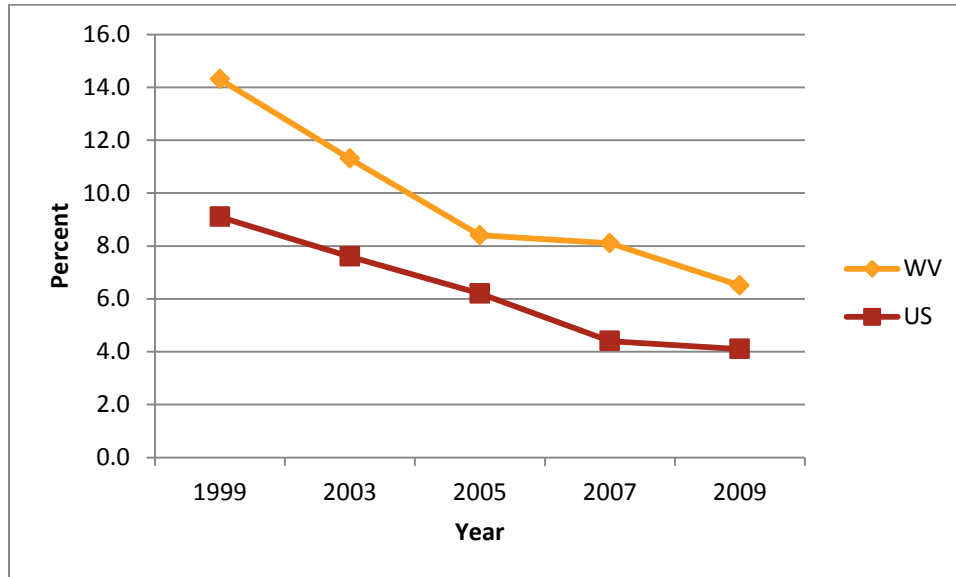
West Virginia	1999	2003	2005	2007	2009
Total	3.1%	2.6%	2.5%	3.7%	4.4%
Female	1.2%	3.0%	2.4%	2.5%	3.2%
Male	4.7%	4.2%	4.8%	4.7%	4.8%
United States	1999	2003	2005	2007	2009
Total	2.4%	3.1%	2.4%	2.3%	2.5%
Female	1.3%	2.0%	1.4%	1.6%	1.7%
Male	3.5%	3.8%	3.3%	2.9%	3.2%
WV:US*	1.3	0.8	1.0	1.6	1.8

\*Ratio of WV relative to US; A score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates

**Substance: Drugs**

**Data Source: YRBSS**

**Students Grades 9 through 12 Ever Using Methamphetamines on One or More Times during Their Life**



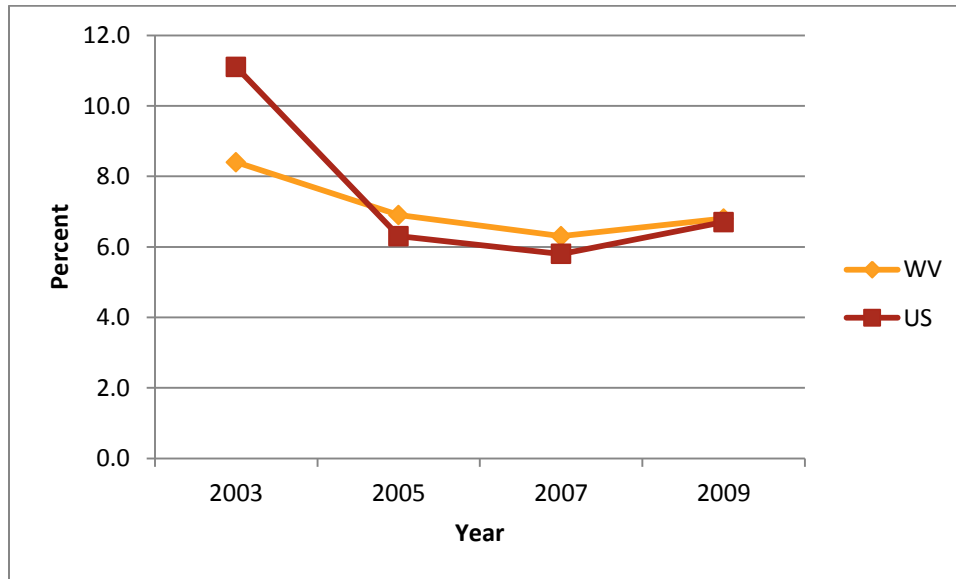
West Virginia	1999	2003	2005	2007	2009
Total	14.3%	11.3%	8.4%	8.1%	6.5%
Female	13.2%	11.2%	9.2%	8.3%	5.5%
Male	15.4%	11.4%	7.6%	7.8%	6.9%
United States	1999	2003	2005	2007	2009
Total	9.1%	7.6%	6.2%	4.4%	4.1%
Female	8.4%	6.8%	6.0%	4.1%	3.3%
Male	9.9%	8.3%	6.3%	4.6%	4.7%
WV:US	1.6	1.5	1.4	1.8	1.6

\*Ratio of WV relative to US; A score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates

**Substance: Drugs**

**Data Source: YRBSS**

**Students Grades 9 through 12 Ever Using Ecstasy on One or More Times during Their Life**



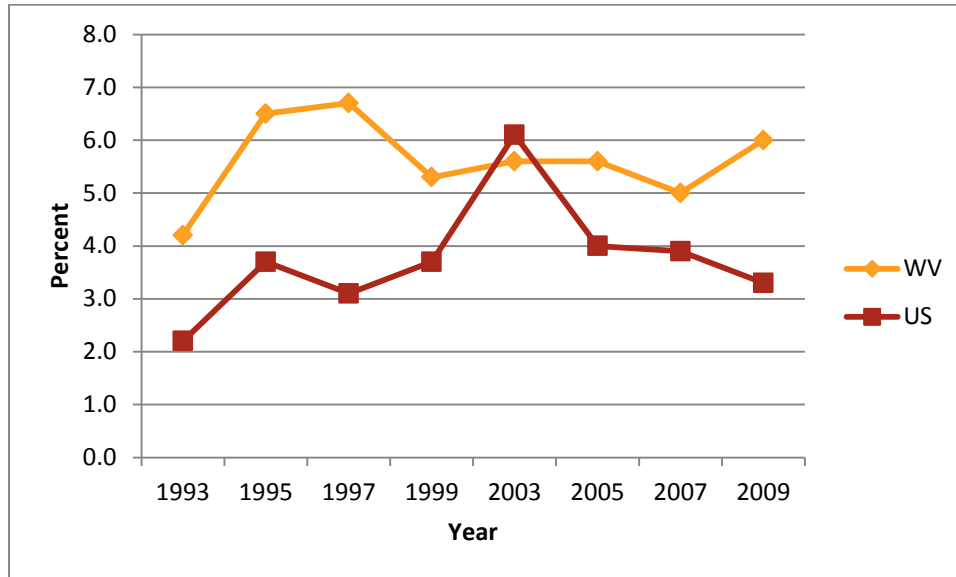
West Virginia	2003	2005	2007	2009
Total	8.4%	6.9%	6.3%	6.8%
Female	8.7%	5.6%	4.9%	5.8%
Male	8.0%	8.2%	7.5%	7.3%
United States	2003	2005	2007	2009
Total	11.1%	6.3%	5.8%	6.7%
Female	10.4%	5.3%	4.8%	5.5%
Male	11.6%	7.2%	6.7%	7.6%
WV:US	0.8	1.1	1.1	1.0

\*Ratio of WV relative to US; A score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates

**Substance: Drugs**

**Data Source: YRBSS**

**Students Grades 9 through 12 Ever Took Steroid Pills or Shots without a Doctor's Prescription  
on One or More Times during Their Life**



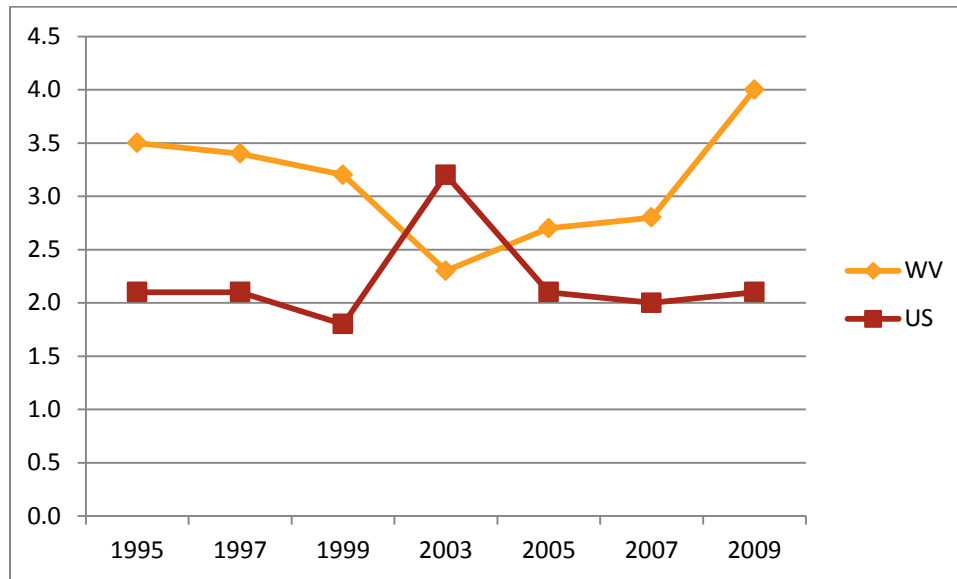
West Virginia	1993	1995	1997	1999	2003	2005	2007	2009
<b>Total</b>	4.2%	6.5%	6.7%	5.3%	5.6%	5.6%	5.0%	6.0%
<b>Female</b>	1.9%	3.9%	4.8%	3.2%	3.7%	4.0%	3.0%	4.1%
<b>Male</b>	6.5%	8.8%	8.8%	7.0%	7.3%	7.3%	6.8%	7.4%
United States	1993	1995	1997	1999	2003	2005	2007	2009
<b>Total</b>	2.2%	3.7%	3.1%	3.7%	6.1%	4.0%	3.9%	3.3%
<b>Female</b>	1.2%	2.4%	2.0%	2.2%	5.3%	3.2%	2.7%	2.2%
<b>Male</b>	3.1%	4.9%	4.1%	5.2%	6.8%	4.8%	5.1%	4.3%
<b>WV:US</b>	<b>1.9</b>	<b>1.8</b>	<b>2.2</b>	<b>1.4</b>	<b>0.9</b>	<b>1.4</b>	<b>1.3</b>	<b>1.8</b>

\*Ratio of WV relative to US; A score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates

**Substance: Drugs**

**Data Source: YRBSS**

**Students Grades 9 through 12 Ever Used a Needle to Inject any Illegal Drug into their Body on One or More Times during Their Life**



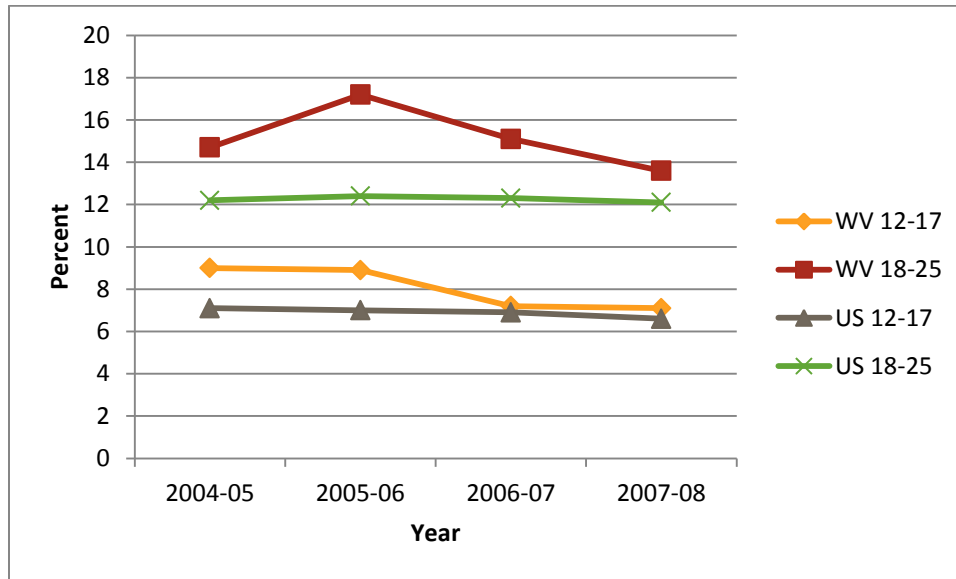
West Virginia	1995	1997	1999	2003	2005	2007	2009
<b>Total</b>	3.5%	3.4%	3.2%	2.3%	2.7%	2.8%	4.0%
<b>Female</b>	2.0%	2.2%	1.7%	1.4%	2.1%	2.2%	3.3%
<b>Male</b>	4.8%	4.6%	4.5%	3.1%	3.3%	3.2%	4.5%
United States	1995	1997	1999	2003	2005	2007	2009
<b>Total</b>	2.1%	2.1%	1.8%	3.2%	2.1%	2.0%	2.1%
<b>Female</b>	1.0%	1.5%	0.7%	2.5%	1.1%	1.3%	1.4%
<b>Male</b>	3.0%	2.6%	2.8%	3.8%	3.0%	2.6%	2.7%
<b>WV:US</b>	<b>1.7</b>	<b>1.7</b>	<b>1.6</b>	<b>1.8</b>	<b>0.7</b>	<b>1.3</b>	<b>1.4</b>

\*Ratio of WV relative to US; A score above 1 means WV rates are above US rates; a score below means WV rates are below US rates

**Substance: Drugs**

**Data Source: NSDUH**

**Individuals Reporting Use of Nonmedical Pain Relievers in the Past Year**



West Virginia	2004-05	2005-06	2006-07	2007-08
Ages 12 thru 17	9.0%	8.9%	7.2%	7.1%
Ages 18 thru 25	14.7%	17.2%	15.1%	13.6%
Ages 26 and over	3.6%	3.6%	3.4%	3.5%
Total	5.4%	5.7%	5.1%	5.0%
United States	2004-05	2005-06	2006-07	2007-08
Ages 12 thru 17	7.1%	7.0%	6.9%	6.6%
Ages 18 thru 25	12.2%	12.4%	12.3%	12.1%
Ages 26 and over	3.2%	3.4%	3.6%	3.4%
Total	4.8%	5.0%	5.1%	4.9%
WV:US*	1.1	1.1	1.0	1.0

Note: Estimates are based on a survey-weighted hierarchical Bayes estimation approach

\*Ratio of WV relative to US; A score above 1 means WV rates are above US rates; a score below means WV rates are below US rates

***Substance: Drugs***

***Data Source: West Virginia Prescription Drug Abuse Quitline***

***Top Abused Prescription Drugs Reported, 2010***

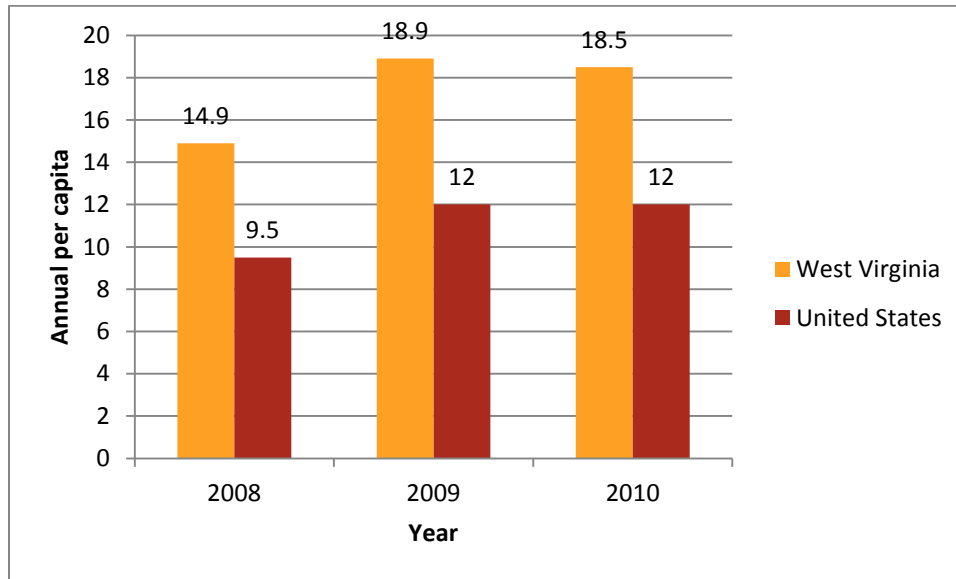
<b>Drug Name</b>	<b>Brand Names</b>	<b>Drug Class</b>	<b>Percentage*</b>
<b>Oxycodone</b>	Oxycontin, Tylox, Percodan, Percocet, Combunox	Opioid	39%
<b>Hydrocodone</b>	Loret, Lortab, Norco, Vicoprofen, Vicodin	Opioid	28%
<b>Alprazolam</b>	Xanax	Benzodiazepine	10%
<b>Morphine</b>	MS Contin, Oramorph, MS-IR, Kadian, Aviniza, Roxanol, Duramorph	Opioid	4%
<b>Hydromorphone</b>	Dilaudid	Opioid	2%

\*Percentage of the total drugs abused in 2010

**Substance: Drugs**

**Data Source: State Health Facts**

**Average Number of Retail Prescription Drugs Filled at Pharmacies (annual per capita)**



Note: Data is total number of prescription drugs filled at retail pharmacies only. All products filled by retail pharmacies, including new prescription and refills of both brand name and generic drugs.

**Average Number of Retail Prescription Drugs Filled at Pharmacies (annual per capita by age)**

	2008	2009	2010
<b>West Virginia</b>			
Age 0-18	6.0	6.3	6.0
Age 19-64	17.4	18.4	18.3
65+	41.9	38.7	36.4
<b>United States</b>			
Age 0-18	3.8	3.9	3.8
Age 19-64	11.6	11.3	11.3
65+	30.1	31.2	31.1

## Age of Initial Use

**Indicator Description:** The following section captures whether students are reporting drug use before the age of 13 and if the rate of students reporting drug consumption before age 13 is increasing.

**Why Indicator is Important:** In order to create prevention strategies, specialists need to determine their target age group. Understanding at what age youth initiate drug use will help focus intervention efforts at decreasing the negative impacts drugs have on an individual and society.

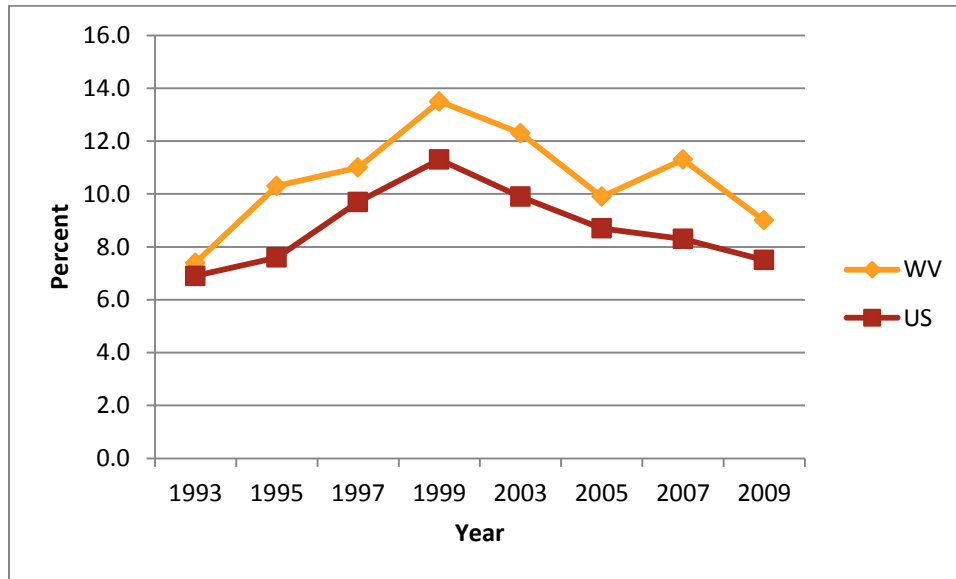
**Key Highlights:**

- West Virginia males reported a greater prevalence of first use of marijuana before age 13 compared to females.
- Although West Virginia youth report a decrease in the first use of marijuana before age 13, the rate remains higher than the US average.

**Substance: Drugs**

**Data Source: YRBSS**

**Students Grades 9 through 12 Reporting First Use of Marijuana before Age 13**



West Virginia	1993	1995	1997	1999	2003	2005	2007	2009
Total	7.4%	10.3%	11.0%	13.5%	12.3%	9.9%	11.3%	9.0%
Female	4.8%	5.2%	6.7%	9.5%	10.9%	6.8%	6.6%	7.0%
Male	10.0%	15.0%	15.6%	17.1%	13.6%	12.8%	15.6%	10.5%
United States	1993	1995	1997	1999	2003	2005	2007	2009
Total	6.9%	7.6%	9.7%	11.3%	9.9%	8.7%	8.3%	7.5%
Female	4.3%	4.8%	6.7%	8.0%	6.9%	6.3%	5.2%	5.0%
Male	9.4%	10.2%	12.2%	14.5%	12.6%	11.0%	11.2%	9.7%
WV:US	1.1	1.4	1.1	1.2	1.2	1.1	1.4	1.2

\*Ratio of WV relative to US; A score above 1 means WV rates are above US rates; a score below means WV rates are below US rates

## Drug Consequences

### Drug Related Morbidity

**Indicator Description:** Drug use has severe consequences. Frequent drug use can send someone to the hospital for various drug related conditions including: drug poisoning, withdrawal, psychosis, and delirium.

**Why Indicator is Important:** This indicator is important to prevention providers and government officials to clearly define the problems associated with drugs and the negative impacts they have on a society as a whole. Tracking drug related morbidity can help prevention providers see where the problem is and which drugs a community is abusing to focus their efforts at reducing the negative impacts drugs have on one's self and society.

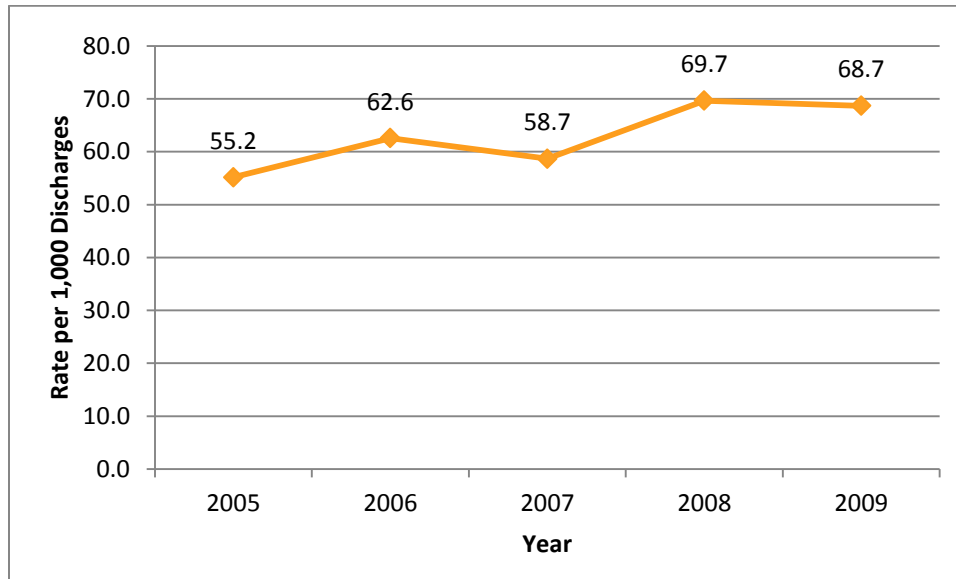
**Key Highlights:**

- The rate of drug related discharges in West Virginia was approximately 69 per 1,000 discharges in 2009.
- Although the number of discharges in West Virginia has stayed relatively unchanged; the number of drug related discharges has increased since 2005.

**Substance: Drugs**

**Data Source: HCUPnet**

**Hospitalization Discharges with a Drug Related-Diagnosis\***



*\*Note: Drug related discharges were identified using all-listed ICD-9CM diagnosis codes 292, 304, 305.2-305.9, 357.6, 357.6, 760.72, 760.73, 779.5, 965.0, 967, 968.0, 969, 970, E850-858, E863, E935.0-E935.2, E937-E940, E980 (see page 118 for description)*

ICD-9-CM all-listed diagnosis code and name	2005	2006	2007	2008	2009
Total Number of Drug related Discharges	15,665	17,747	16,642	19,922	19,438
Total Number of Discharges	283,964	283,651	283,599	285,997	283,023
Rate per 1,000 Discharges	55.2	62.6	58.7	69.7	68.7

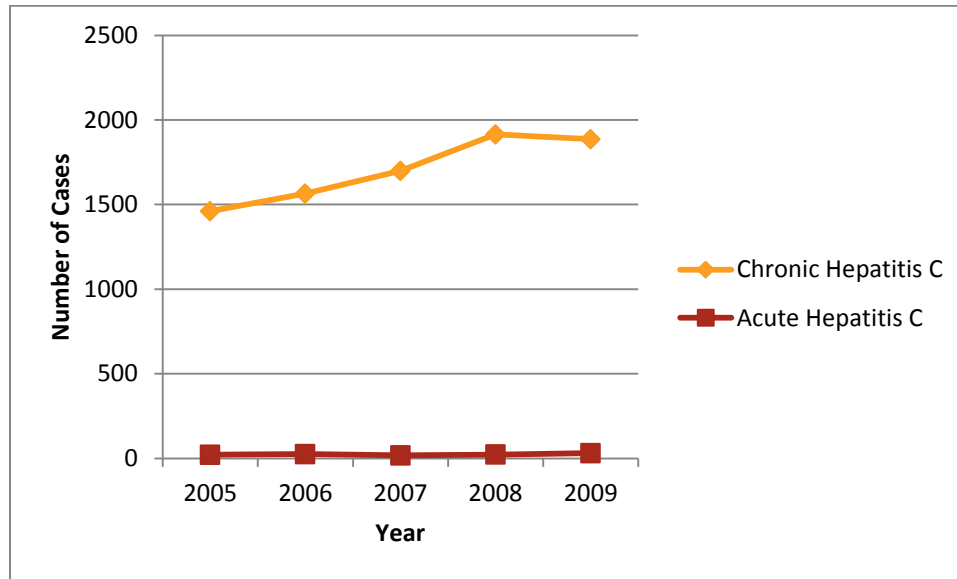
### Substance Abuse/Misuse ICD-9 Code Descriptions

Illness or Injury	ICD-9 Code
Drug psychoses	292
Drug dependence	304
Nondependent abuse of drugs	305.2-305.9
Polyneuropathy due to drugs	357.6
Narcotics affecting fetus or newborn via placenta or breast	760.72
Hallucinogens affecting fetus or newborn via placenta or breast	760.73
Drug withdrawal syndrome in newborn	779.5
Poisoning by opiates and related narcotics	965.0
Poisoning by sedatives and hypnotics	967
Poisoning by CNS muscle tone depressants	968.0
Poisoning by psychotropic agents	969
Poisoning by CNS stimulants	970
Accidental poisoning by drugs, medicaments, and biologicals	E850-858
Agricultural and horticultural chemical and pharmaceutical preparations other than plant foods and fertilizers	E863
Heroin, methadone, other opiates and related narcotics, and other drugs causing adverse effects in therapeutic use	E935.0-E935.2; E937-E940
Injury undetermined whether accidentally or purposely inflicted from poisoning by drugs, medicaments, and other	E980

**Substance: Drugs**

**Data Source: OEPS**

***Hepatitis C Cases in West Virginia***



***Acute Hepatitis C Cases in West Virginia***

	2005	2006	2007	2008	2009
Number of Acute Hepatitis C Cases	21	25	18	22	31
Rate per 100,000	1	1.4	1	1.2	1.7

***Chronic Hepatitis C Cases in West Virginia***

	2005	2006	2007	2008	2009
Number of Chronic Hepatitis C Cases	1,460	1,564	1,699	1,914	1,886
Rate per 100,000	80.7	86.5	93.9	105.9	104.3

***HIV/AIDS Cases in West Virginia***

	2005	2006	2007	2008	2009	2010
Number of HIV/AIDS that are Intravenous Drug Users	8	8	7	10	6	7
Total Number of HIV/AIDS cases	85	59	66	68	74	72
Percent of HIV/AIDS cases who are Intravenous Drug Users	9.4%	13.6%	10.6%	14.7%	8.1%	9.7%

## Drug Related Mortality

**Indicator Description:** Drug use has severe consequences. Drug use is the cause of a growing number of deaths in the United States. A national study reports that there is a drug-induced death in the United States every 15 minutes. A person's death due to drug use can result from an unintentional overdose, a suicide, homicide, or it could be undetermined.

**Why Indicator is Important:** This indicator is important to measure the most severe consequence of drug use which is death. Tracking drug related mortality can help prevention providers seek those who are at highest risk and focus their efforts at reducing the negative impacts drugs have on one's self and society.

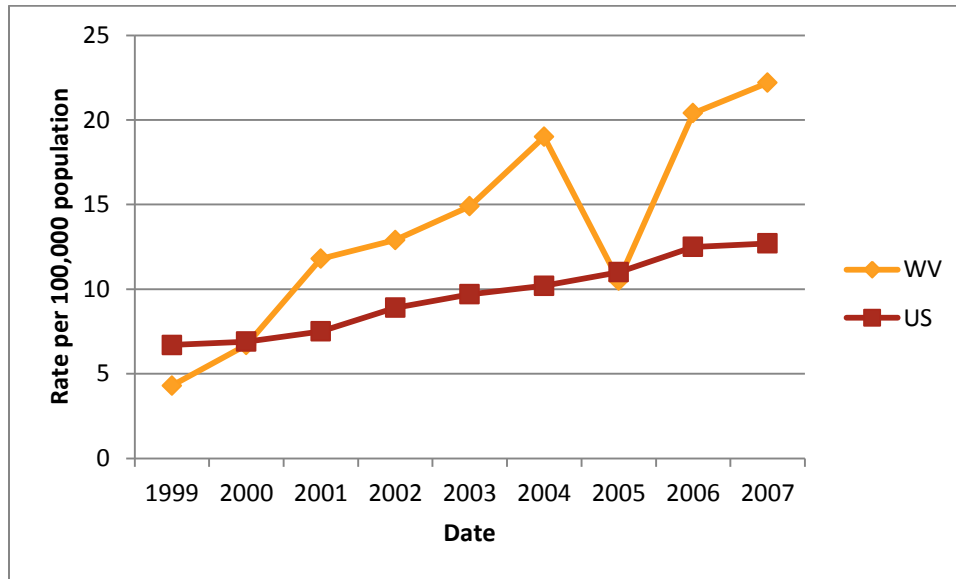
**Key Highlights:**

- From 2001 to 2010, West Virginia had a 214% increase in the number of prescription drug overdoses in the state.
- In 2010, opiates were the number one cause of death associated with drug overdoses in West Virginia.
- The rate of unintentional poisoning deaths in West Virginia was double that of the US rate in 2007.

**Substance: Drugs**

**Data Source: NVSS**

**Deaths from Illicit Drug Use per 100,000 Population**



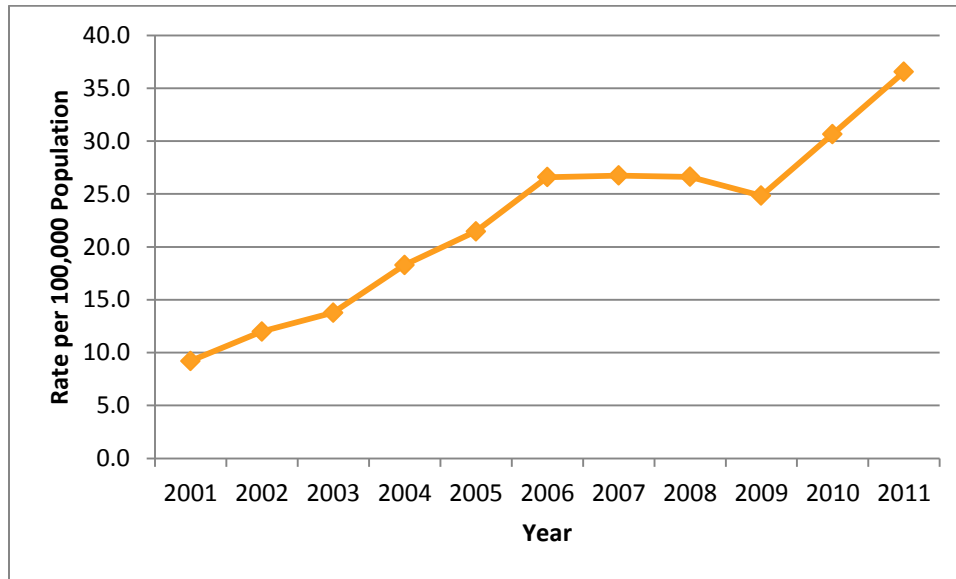
West Virginia	1999	2000	2001	2002	2003	2004	2005	2006	2007
Number of Deaths	78	121	212	232	269	343	189	369	402
Rate per 100,000	4.3	6.7	11.8	12.9	14.9	19.0	10.5	20.4	22.2
United States	1999	2000	2001	2002	2003	2004	2005	2006	2007
Number of Deaths	18,830	19,374	21,384	25,702	28,129	29,887	32,475	37,359	38,276
Rate per 100,000	6.7	6.9	7.5	8.9	9.7	10.2	11.0	12.5	12.7
WV:US*	0.6	1.0	1.6	1.4	1.5	1.9	1.0	1.6	1.7

\*Ratio of WV relative to US; A score above 1 means WV rates are above US rates; a score below means WV rates are below US rates

**Substance: Drugs**

**Data Source: HSC**

***Prescription Drug Overdose Deaths in West Virginia***

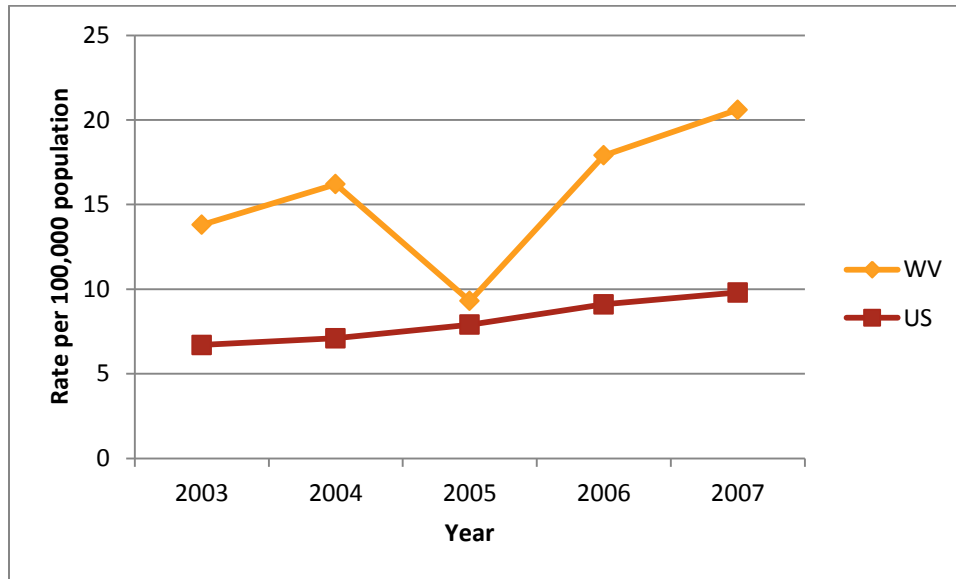


Year	Number of Deaths	Rate per 100,000 Population
2001	167	9.2
2002	218	12.0
2003	251	13.8
2004	334	18.3
2005	393	21.5
2006	488	26.6
2007	492	26.7
2008	491	26.6
2009	459	24.8
2010	568	30.7
2011	678	36.5

**Substance: Drugs**

**Data Source: NVSS**

**Unintentional Poisonings Mortality Rates**



	West Virginia		United States		WV:US*
	Deaths	Rate	Deaths	Rate	Ratio
2003	238	13.8	19,457	6.7	2.0
2004	287	16.2	20,950	7.1	2.3
2005	163	9.3	23,618	7.9	1.2
2006	316	17.9	27,531	9.1	2.0
2007	360	20.6	29,846	9.8	2.1

\*Ratio of WV relative to US; A score above 1 means WV rates are above US rates; a score below means WV rates are below US rates

Note: Unintentional poisoning deaths that occurred during 2003-2007 were defined as those with underlying cause of death codes X40-X49 Accidental poisonings from the International Classification of Diseases, Tenth Revision (ICD-10)

## Treatment

**Indicator Description:** The Treatment Episode Data Set (TEDS) includes records for some 1.5 million substance abuse treatment admissions annually. This section describes the number of admissions to state funded facilities for the treatment of drug abuse and dependence.

**Why Indicator is Important:** This indicator is important because it illustrates the proportion of admissions to drug treatment facilities which constitute a burden on public funds. In addition, this data allows providers to focus efforts to address the needs of the people in treatment by their primary substance of abuse or misuse.

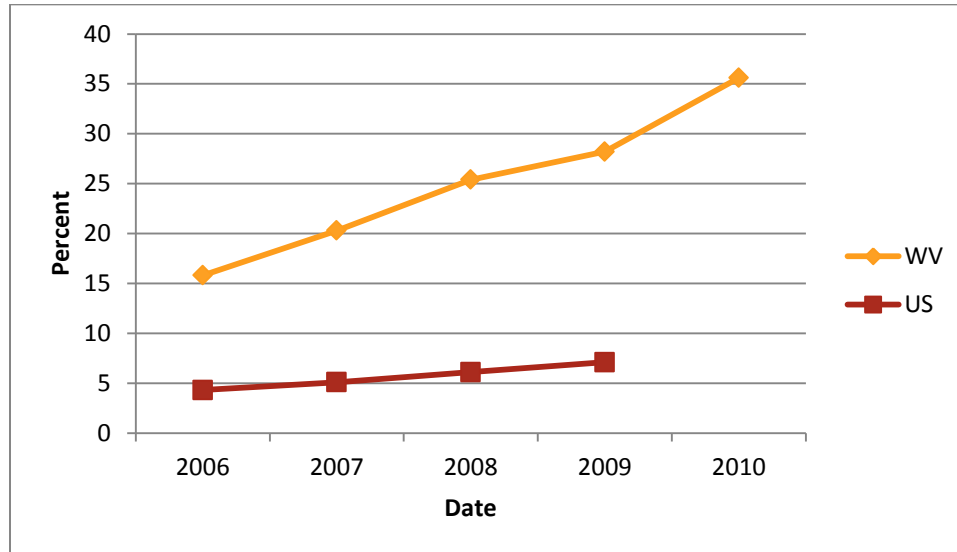
**Key Highlights:**

- The percentage of treatment admissions for other opiates has been on the rise in West Virginia, and is almost four times higher than the United States.
- Almost 50% of treatment admissions for other opiates have been for individuals aged 21-30. An additional 30% has been for those aged 31-40 years.

**Substance: Drugs**

**Data Source: TEDS**

**Percentage of Treatment Admissions, 2006-2010, for Other Opiates\* as Primary Substance**



West Virginia	2006	2007	2008	2009	2010
Total	15.8%	20.3%	25.4%	28.2%	35.6%
Male	50.3%	50.5%	48.1%	49.0%	50.5%
Female	49.5%	49.5%	51.7%	50.9%	49.4%
United States	2006	2007	2008	2009	2010
Total	4.3%	5.1%	6.1%	7.1%	N/A
Male	53.6%	53.3%	52.9%	53.4%	N/A
Female	46.4%	46.7%	47.1%	46.6%	N/A
WV:US**	3.7	4.0	4.2	4.0	-

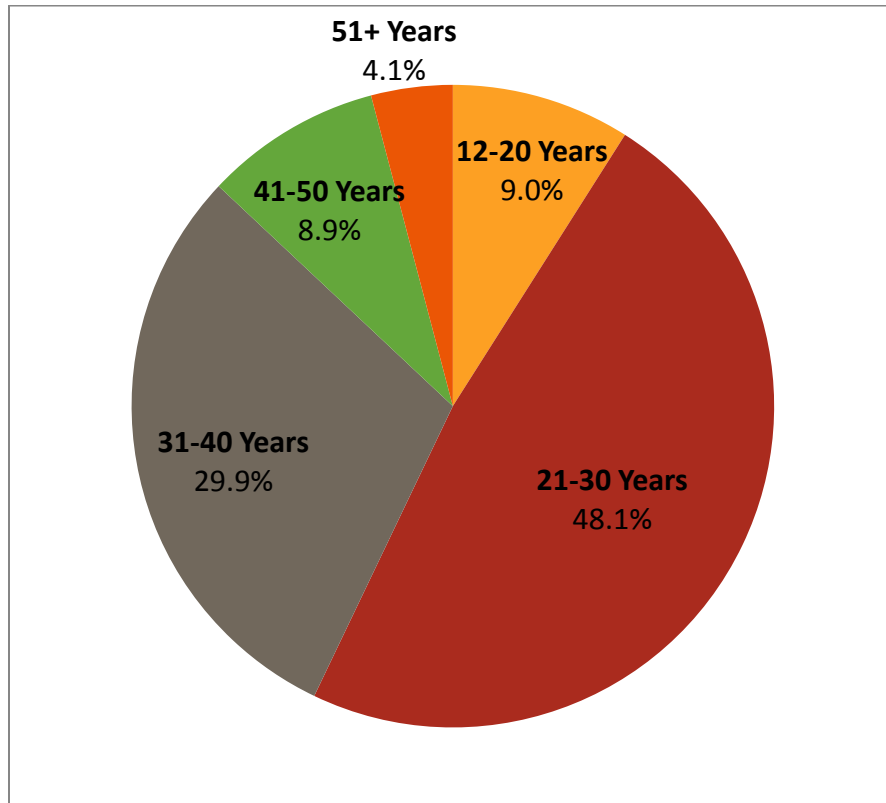
\*The Other Opiates category includes the non-prescription use of methadone, codeine, morphine, oxycodone, hydromorphone, meperidine, opium, and other drugs with morphine-like effects.

\*\*Ratio of WV relative to US; a score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US rates. N/A: Data not available.

**Substance: Drugs**

**Data Source: TEDS**

**Percentage of Treatment Admissions, 2010, for Other Opiates\*  
as Primary Substance by Age Group**



\*The Other Opiates category includes the non-prescription use of methadone, codeine, morphine, oxycodone, hydromorphone, meperidine, opium, and other drugs with morphine-like effects.

## Substance Abuse Treatment

Data Source: TEDS

### Treatment Admissions, 2006-2009, by Primary Substance

Substance	2006		2007		2008		2009		2010	
	WV	US	WV	US	WV	US	WV	US	WV	US
<b>Alcohol</b>	43.2%	22.2%	41.4%	22.8%	41.5%	23.4%	41.9%	23.4%	27.5%	N/A
<b>Alcohol with secondary substance</b>	10.6%	17.7%	10.2%	18.0%	7.6%	18.0%	7.2%	18.2%	12.0%	N/A
<b>Cocaine</b>	9.9%	14.0%	7.4%	13.0%	5.2%	11.4%	3.4%	9.3%	3.0%	N/A
<b>Marijuana</b>	12.7%	16.0%	14.1%	16.0%	12.9%	17.2%	11.7%	18.1%	13.2%	N/A
<b>Heroin</b>	2.4%	13.8%	2.1%	13.6%	2.6%	13.9%	2.9%	14.3%	3.8%	N/A
<b>Other Opiates</b>	15.8%	4.3%	20.3%	5.1%	25.4%	6.1%	28.2%	7.1%	35.6%	N/A
<b>Hallucinogens</b>	0.1%	0.1%	0.0%	0.1%	0.1%	0.1%	0.0%	0.1%	0.0%	N/A
<b>Amphetamines</b>	2.3%	8.3%	2.0%	7.6%	1.7%	6.3%	1.3%	5.8%	2.1%	N/A
<b>Tranquilizers</b>	1.6%	0.5%	1.6%	0.6%	1.7%	0.6%	2.1%	0.7%	1.8%	N/A
<b>Sedatives</b>	0.8%	0.2%	0.5%	0.2%	1.0%	0.2%	0.8%	0.3%	0.7%	N/A
<b>Inhalants</b>	0.2%	-	0.2%	-	0.2%	-	0.1%	-	0.1%	N/A
<b>PCP</b>	0.0%	0.1%	0.0%	0.2%	0.0%	0.2%	0.0%	0.2%	0.0%	N/A
<b>Other</b>	0.4%	2.8%	0.2%	2.8%	0.1%	2.6%	0.4%	2.5%	0.0%	N/A

N/A Data not available.

## Substance Abuse Treatment

Data Source: TEDS

### Treatment Admissions, 2006-2009, by Age Group

Age Group	2006		2007		2008		2009		2010	
	WV	US	WV	US	WV	US	WV	US	WV	US
<b>0-11 Years</b>	0.0%	0.1%	0.0%	0.1%	0.1%	0.1%	0.0%	0.1%	0.0%	N/A
<b>12-17 Years</b>	5.4%	7.5%	5.5%	7.4%	4.9%	7.6%	3.8%	7.7%	4.8%	N/A
<b>18-20 Years</b>	6.6%	6.6%	5.8%	6.6%	5.9%	6.7%	6.1%	6.9%	7.3%	N/A
<b>21-25 Years</b>	17.7%	14.9%	17.8%	14.8%	17.4%	14.9%	17.3%	15.3%	17.9%	N/A
<b>26-30 Years</b>	17.1%	13.2%	18.5%	13.8%	18.7%	14.3%	18.9%	14.7%	19.2%	N/A
<b>31-35 Years</b>	13.4%	11.6%	13.2%	11.0%	13.9%	10.8%	14.8%	11.0%	14.8%	N/A
<b>36-40 Years</b>	11.1%	13.2%	12.0%	12.7%	11.5%	11.9%	11.1%	11.1%	12.1%	N/A
<b>41-45 Years</b>	11.2%	13.8%	10.5%	13.3%	10.0%	12.6%	9.2%	11.7%	8.3%	N/A
<b>46-50 Years</b>	8.3%	10.1%	7.9%	10.5%	8.4%	10.7%	8.4%	10.6%	7.7%	N/A
<b>51-55 Years</b>	4.9%	5.4%	4.7%	5.7%	5.3%	6.2%	5.7%	6.4%	4.0%	N/A
<b>56-60 Years</b>	2.6%	2.3%	2.6%	2.5%	2.2%	2.7%	2.7%	2.8%	2.8%	N/A
<b>61-65 Years</b>	1.0%	0.8%	0.7%	0.9%	1.0%	0.9%	1.1%	1.0%	0.6%	N/A
<b>66+ Years</b>	0.7%	0.5%	0.7%	0.5%	0.7%	0.5%	0.9%	0.6%	0.4%	N/A

N/A Data not available

## Crime

**Indicator Description:** Drugs are related to crime in multiple ways. Most often, it is a crime to use, possess, manufacture, or distribute drugs classified as having potential for abuse such as cocaine, marijuana, heroin, and amphetamines. Drugs are also related to crime through drug trafficking and drug production.

**Why Indicator is Important:** This indicator is important to show the effects drug use has on the state. Crime has a social impact for a state and is costly. Tracking crime allows government officials to see the extent of the problem, place a cost related to the problem, and provides a way for prevention providers to focus their efforts at reducing the negative impacts drugs have on one's self and society.

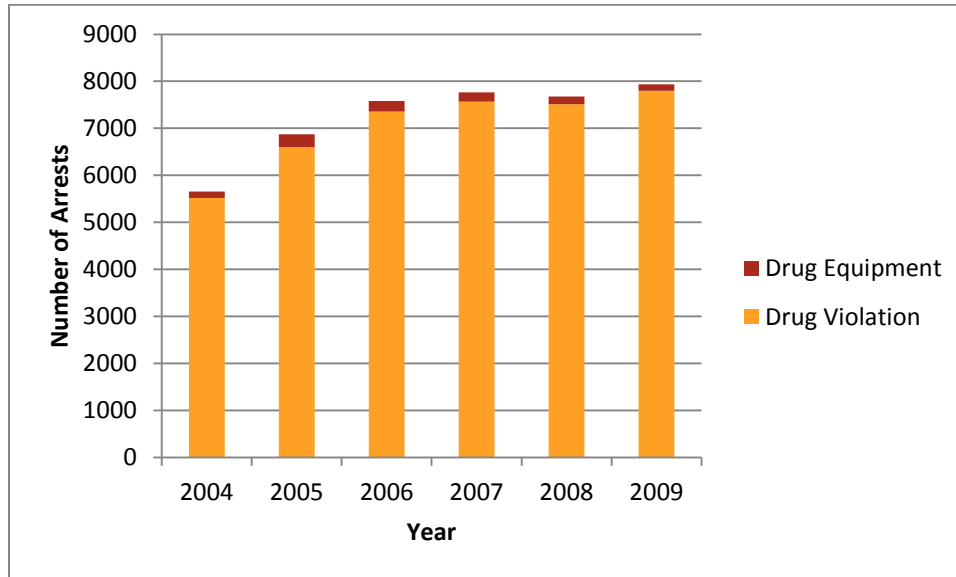
**Key Highlights:**

- The number of people in West Virginia admitted to a correctional facility for drug offenses in West Virginia has remained relatively unchanged since 2006.
- In 2009, there were almost 8,000 arrests in West Virginia for drug offenses.

***Substance: Drugs***

**Data Source: WVIBRS**

**Number of Arrests in West Virginia due to Drugs**



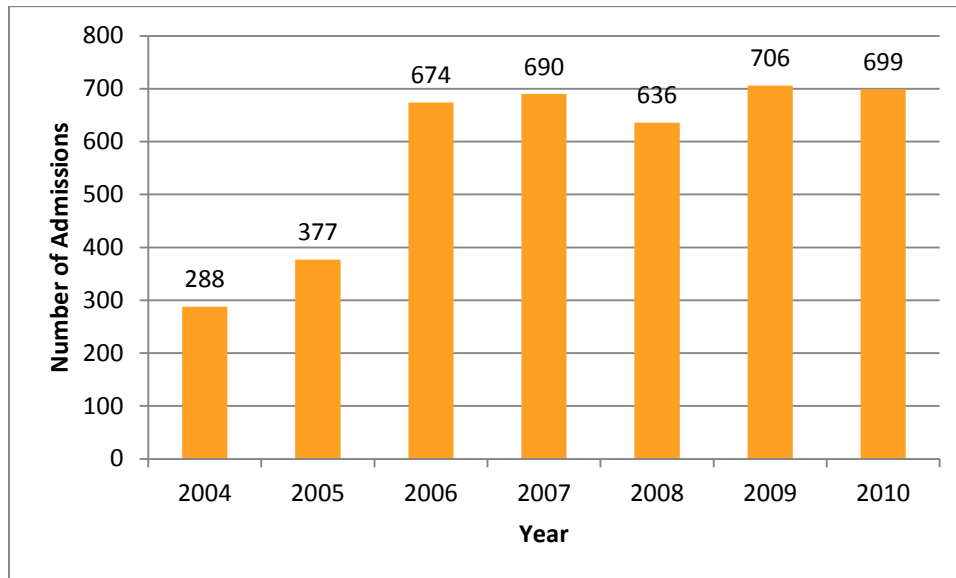
	2004	2005	2006	2007	2008	2009
Drug Violations	5,517	6,603	7,359	7,569	7,513	7,799
Drug Equipment	138	269	219	194	163	139

Note: Drug/narcotic violations are the unlawful cultivation, manufacture, distribution, sale, purchase, use, possession, transportation, or importation of any controlled drug or narcotic substance. Drug equipment violations are the unlawful manufacture, sale, purchase, possession, or transportation of equipment or devices utilized in preparing and/or using drugs or narcotics.

**Substance: Alcohol**

**Data Source: WVIBRS**

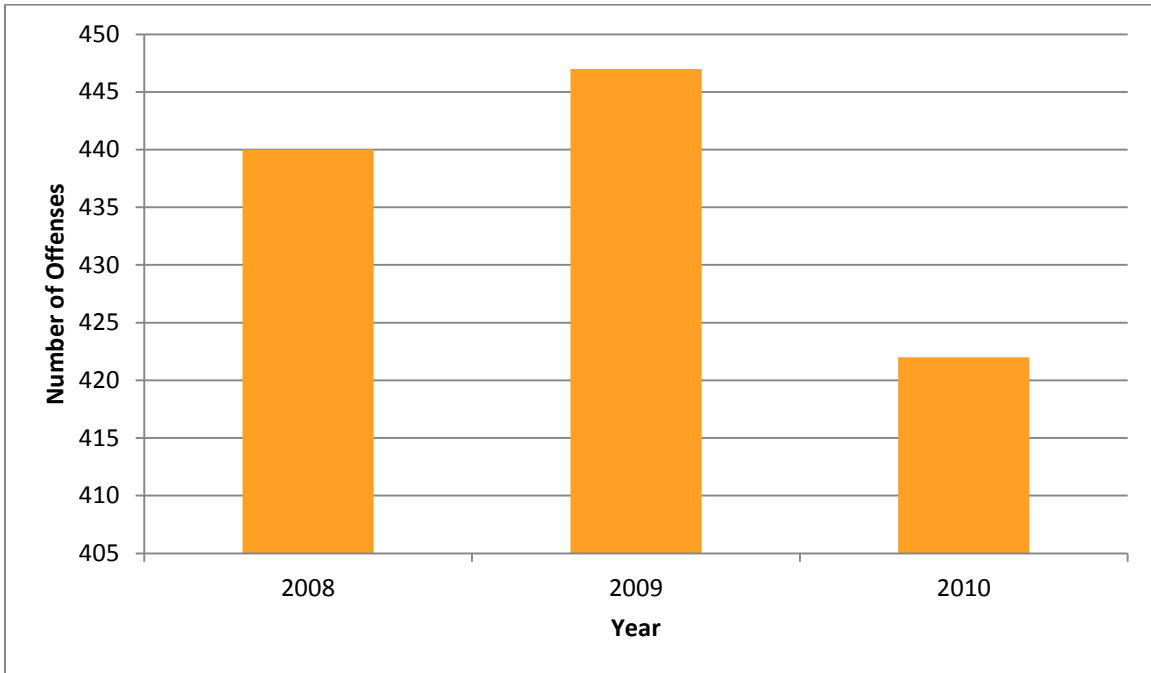
***Number of People Admitted to a Correctional Facility for Felony Drug Offenses***



*Note: Admissions include all those offenders entering a Division of Corrections facility during the indicated year for drug offenses*

***Substance: Alcohol***

**Data Source: WV Centralized Juvenile Probation Data System**



	2008	2009	2010
Breathing, inhaling, or drinking certain intoxicating compounds	8	3	5
Items designed or marketed for use with controlled sub	0	0	1
Manufacture/Deliver Counterfeit Schedule V (Misdemeanor)	12	14	14
Manufacture, deliver schedule I,II,III,IV (Felony)	126	119	112
Obtaining Controlled Substance By Fraud	1	1	1
Operating or attempting to operate clandestine drug laboratories	0	1	0
Possession of Controlled Substance	283	333	275
Prohibited drug purchases or receipt	0	0	5
Transportation of Schedule I-IV controlled substance	1	1	0
Transportation of Schedule V controlled substance	2	5	9
Sale of drug paraphernalia at certain events or outdoors prohibited	6	0	0
Unlawfully distributed as registrant Schedule I or II	1	0	0
<b>Total Juvenile Controlled Substance-Related Offenses</b>	<b>440</b>	<b>447</b>	<b>422</b>

## Drug Dependence or Abuse

**Indicator Description:** The Diagnostic and Statistical Manual of Mental Disorders (DSM) is a handbook published by the American Psychiatric Association (APA) and contains the standard classification of mental disorders used by many mental health professionals in the United States. Drug dependence is defined as when an individual persists in the use of drugs despite problems related to the use of the substance. Drug abuse refers to a destructive pattern of use of drug that is not considered dependent.

**Why Indicator is Important:** Drug abuse and dependence create problems in one's life which include not being able to meet work, school, or family responsibilities; drug arrests and car crashes; and overdose deaths. Proper diagnosis is essential in determining appropriate treatment for individuals for alcohol abuse or dependence.

**Key Highlights:**

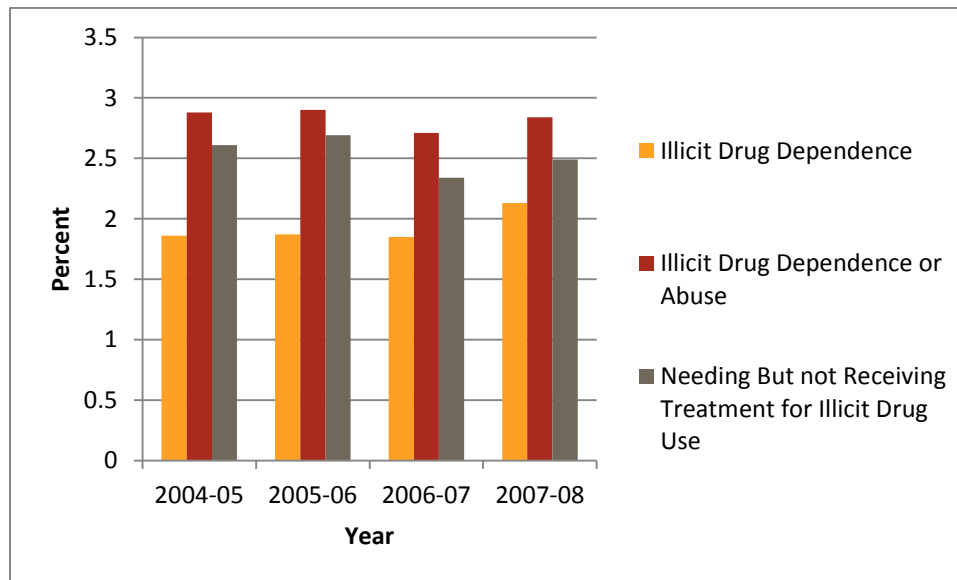
- In 2007-08, West Virginia rates for drug abuse and dependence were higher than the national average.
- The percentage of West Virginians reporting needing but not receiving treatment for drug abuse has gone relatively unchanged since 2004.

**Substance: Drugs**

**Data Source: NSDUH**

**West Virginia**

**Persons Aged 12 and Older Meeting DSM-IV Criteria for Illicit Drug Abuse or Dependence\***



West Virginia	2004-05	2005-06	2006-07	2007-08
Illicit Drug Dependence	1.86%	1.87%	1.85%	2.13%
Illicit Drug Dependence or Abuse	2.88%	2.90%	2.71%	2.84%
Needing But not Receiving Treatment for Illicit Drug Use	2.61%	2.69%	2.34%	2.49%
United States	2004-05	2005-06	2006-07	2007-08
Illicit Drug Dependence	1.98%	1.95%	1.93%	1.92%
Illicit Drug Dependence or Abuse	2.92%	2.83%	2.81%	2.78%
Needing But not Receiving Treatment for Illicit Drug Use	2.67%	2.54%	5.50%	2.52%

Note: Estimates are based on a survey-weighted hierarchical Bayes estimation approach

\*Dependence or abuse is based on definition found in the 4<sup>th</sup> edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)

## Drug Use Risk and Protective Factors

### Access

**Indicator Description:** Risk and Protective factors measure how substance abuse begins and how it progresses. Risk factors can increase a person's chances for substance abuse, while protective factors can reduce the risk. Access to drugs is a community risk factor. Individuals have a greater risk to abuse use drugs that are cheap and easily accessible.

**Why Indicator is Important:** Understanding factors that increase a person's chances for substance abuse allows prevention specialists to focus on positive interventions that will achieve a positive population level change in substance abuse consumption. Understanding where drugs are accessed can help communities implement policies that reduce the ease and availability of drugs.

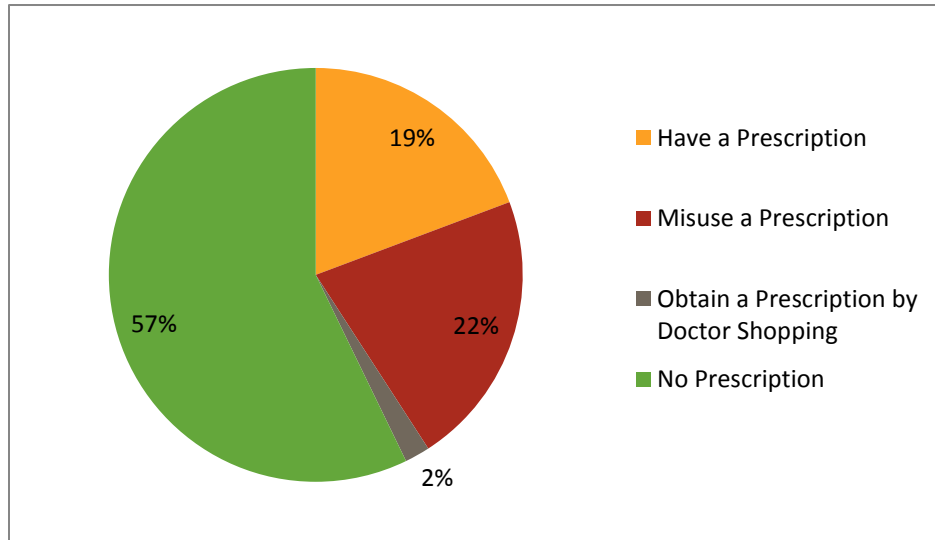
#### Key Highlights:

- In 2010, 57% of individuals who called the West Virginia Prescription Drug Abuse Hotline reported not having a prescription for the prescription drugs they were using.
- In 2010, the top sources identified from the Prescription Drug Hotline of where callers obtained their prescription drugs included: buying from the streets, stealing from family or friends, or given by family or friends.

**Substance: Drugs**

**Data Source: West Virginia Prescription Drug Abuse Quitline**

**How Individuals Report Obtaining Prescription Drugs, 2010**



**Where Individuals Report Obtaining Prescription Drugs, 2010**

	Yes		No	
	N	%	N	%
Doctor Shopping	19	15%	109	85%
Internet	0	0%	128	100%
Buy from the Streets	105	82%	23	18%
Buy from Family or Friends	73	57%	55	43%
Steal from Family or Friends	19	15%	109	85%
Given by Family or Friends	54	43%	74	59%
Other	12	9%	116	90%

## Perception of Harm

**Indicator Description:** Risk and Protective factors measure how substance abuse begins and how it progresses. Risk factors can increase a person's chances for substance abuse, while protective factors can reduce the risk. An individual's perception of drugs can influence their decision to use drugs. In families where parents abuse drugs or are tolerant of children's use, the more likely they are to abuse drugs as adolescents. The risk is further increased if a parent involves children in their own drug using behavior.

**Why Indicator is Important:** Understanding factors that increase a person's chances for substance abuse allows prevention specialists to focus on positive interventions that will achieve a positive population level change in substance abuse consumption. Understanding attitudes and beliefs is an important piece in prevention interventions.

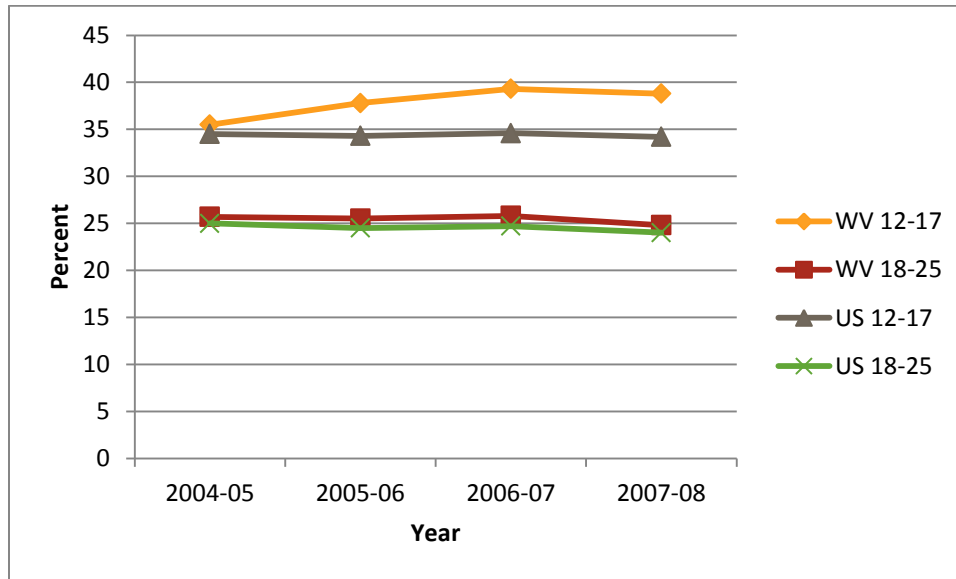
**Key Highlights:**

- West Virginians aged 18 to 24 years of age reported the lowest perception of risk associated with smoking marijuana once a month in 2007-08 when compared to any other age group.

**Substance: Drugs**

**Data Source: NSDUH**

**Perceptions of Great Risk of Smoking Marijuana Once a Month**



West Virginia	2004-05	2005-06	2006-07	2007-08
Ages 12 thru 17	35.5%	37.8%	39.3%	38.8%
Ages 18 thru 25	25.7%	25.5%	25.8%	24.8%
Ages 26 and over	48.8%	48.5%	46.7%	47.0%
Total	44.8%	44.8%	43.6%	43.7%
United States	2004-05	2005-06	2006-07	2007-08
Ages 12 thru 17	34.5%	34.3%	34.6%	34.2%
Ages 18 thru 25	25.0%	24.5%	24.7%	24.0%
Ages 26 and over	42.1%	42.0%	42.0%	40.7%
Total	39.0%	38.9%	38.9%	37.9%
WV:US*	1.1	1.2	1.1	1.2

Note: Estimates are based on a survey-weighted hierarchical Bayes estimation approach

\*Ratio of WV relative to US; A score above 1 means WV rates are above US rates; a score below means WV rates are below US rates

## Mental Health

### Depression and Psychological Distress

**Indicator Description:** Mental health affects the way a person feels and responds to life on a daily basis. When there is something wrong or out of balance in one's mental state, problems occur until it is properly addressed, through diagnosis and treatment. The connection between mental health and substance abuse has been widely documented. This is not to say that every person who abuses drugs or alcohol has a mental illness, but that there is a higher rate of mentally ill addicts than those who are not. The Diagnostic and Statistical Manual of Mental Disorders (DSM) is published by the American Psychiatric Association and provides common language and standard criteria for the classification of mental disorders. The DSM organizes disorders into 16 major diagnostic classes. Some types of mental illnesses include: anxiety disorders, mood disorders, psychotic disorders, eating disorders, impulse control and addiction disorders, and personality disorders.

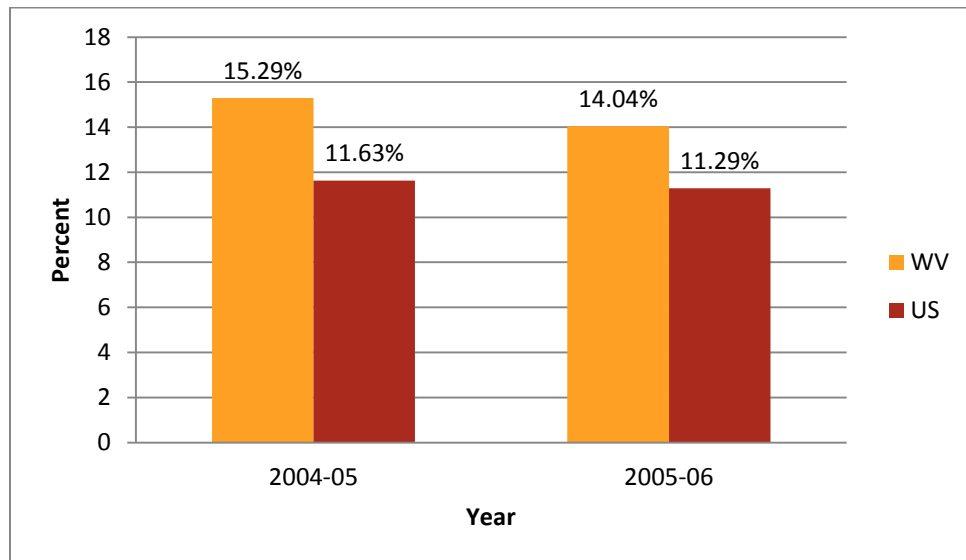
**Why Indicator is Important:** This indicator is important to prevention providers to identify those with mental health and substance abuse issues to address co-occurring illnesses. One cannot be treated without addressing the other.

**Key Highlights:**

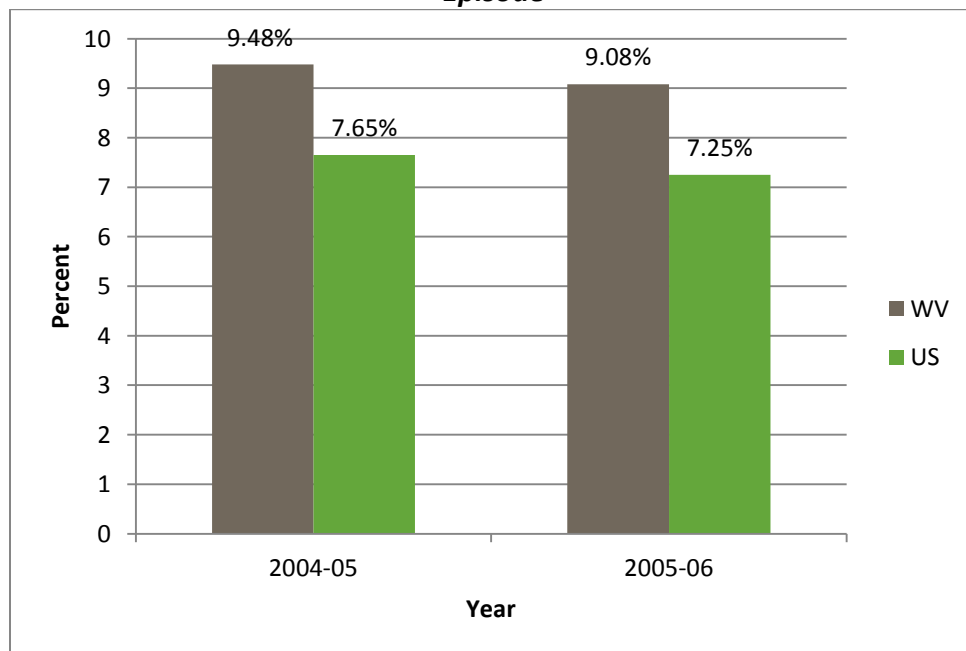
- Over 14% of West Virginians in 2006 reported having at least one serious psychological distress episode within the past year.
- Overall, students in West Virginia reporting feeling sad or hopelessness have been consistent with the national averages. However, male students grades 9 through 12 in West Virginia reported a disproportionally higher rate of feeling sad or hopeless when compared to the national average.

**Data Source: NSDUH**

***Individuals Reporting Having Serious Psychological Distress***



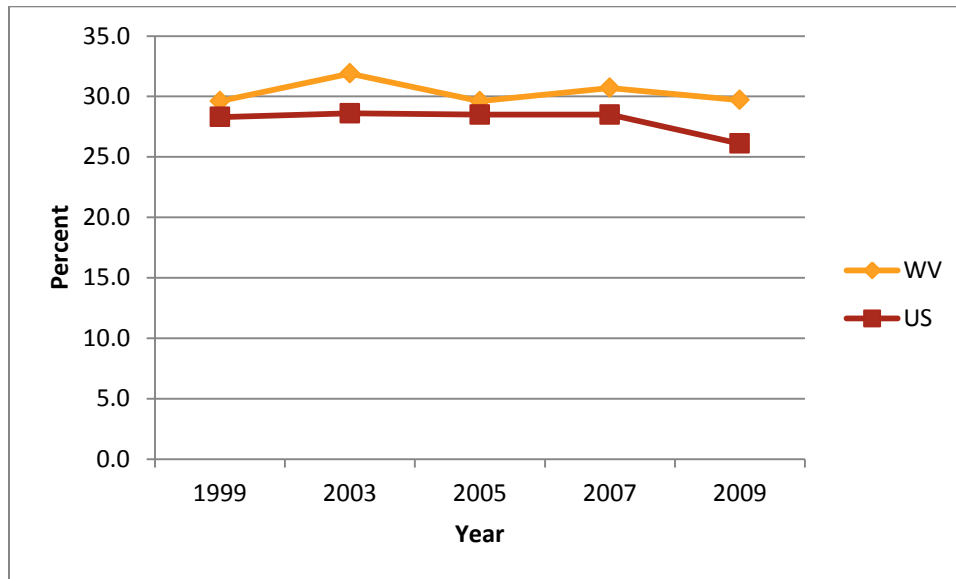
***Individuals Reporting Having at Least One Major Depressive Episode***



Note: A Major Depressive Episode is defined in the 4<sup>th</sup> edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) as a period of at least 2 weeks when a person experienced depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms.

Data Source: YRBSS

**Students Grades 9 through 12 who reported Feeling Sad or Hopeless**



West Virginia	1999	2003	2005	2007	2009
Total	29.6%	31.9%	29.6%	30.7%	29.7%
Female	36.4%	41.7%	34.4%	40.9%	36.7%
Male	36.4%	41.7%	34.4%	40.9%	36.7%
United States	1999	2003	2005	2007	2009
Total	28.3%	28.6%	28.5%	28.5%	26.1%
Female	35.7%	35.5%	36.7%	35.8%	33.9%
Male	21.0%	21.9%	20.4%	21.2%	19.1%
WV:US*	1.0	1.1	1.0	1.1	1.0

\*Ratio of WV relative to US; A score above 1 means WV rates are above US rates; a score below means WV rates are below US rates.

Note: Students reporting that they felt sad or hopeless almost every day for two or more weeks in a row so that they stopped doing some usual activities during the 12 months before the survey.

## Suicide

**Indicator Description:** Suicide is fatal. Those who attempt suicide and survive may have serious injuries like broken bones, brain damage, or organ failure. According to the CDC, people who survive often have depression and other mental health problems. Research shows that several factors can put a person at risk for attempting or committing suicide. A history of depression or other mental illness can increase a person's risk for committing suicide. In a recent study involving The National Violent Death Reporting System, one-third of those who died by suicide tested positive for alcohol at the time of death and nearly 1 in 5 had evidence of opiates, including heroin and prescription pain killers.

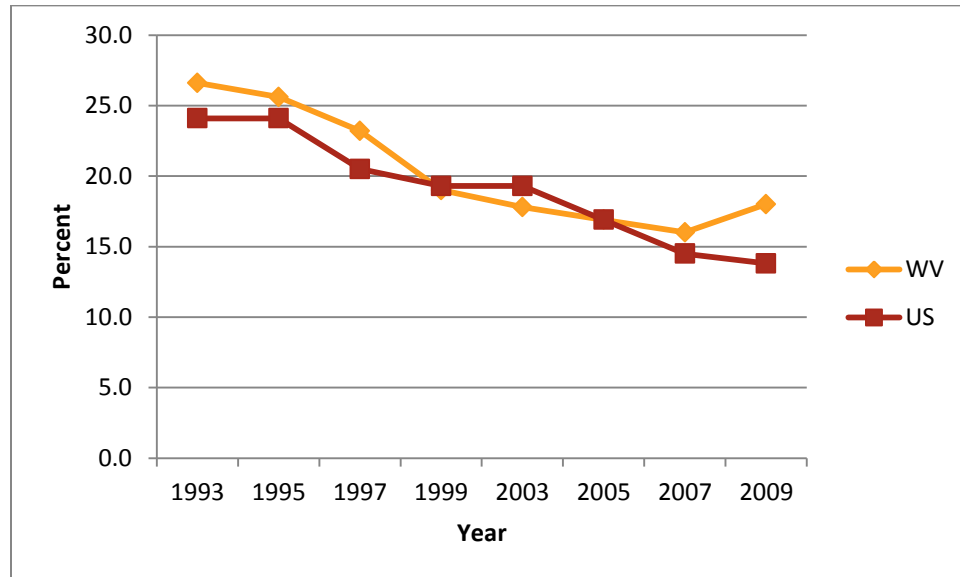
**Why Indicator is Important:** This indicator is important to heighten awareness surrounding factors that can put a person at risk for attempting suicide. Suicide prevention providers need to identify those with mental health and substance abuse issues and address co-occurring illnesses. Increased awareness about how alcohol, drug use, and mental illnesses increase the risk of suicide will also help prevention specialists address this threat when targeting at risk populations.

**Key Highlights:**

- Youth in West Virginia reported one of the highest suicide attempt rates in the nation at nearly 11% in 2009.
- West Virginia's suicide rates are well above the national average.

**Data Source: NSDUH**

***Students Grades 9 through 12 who reported Seriously Considering Attempting Suicide during the 12 months before the Survey***



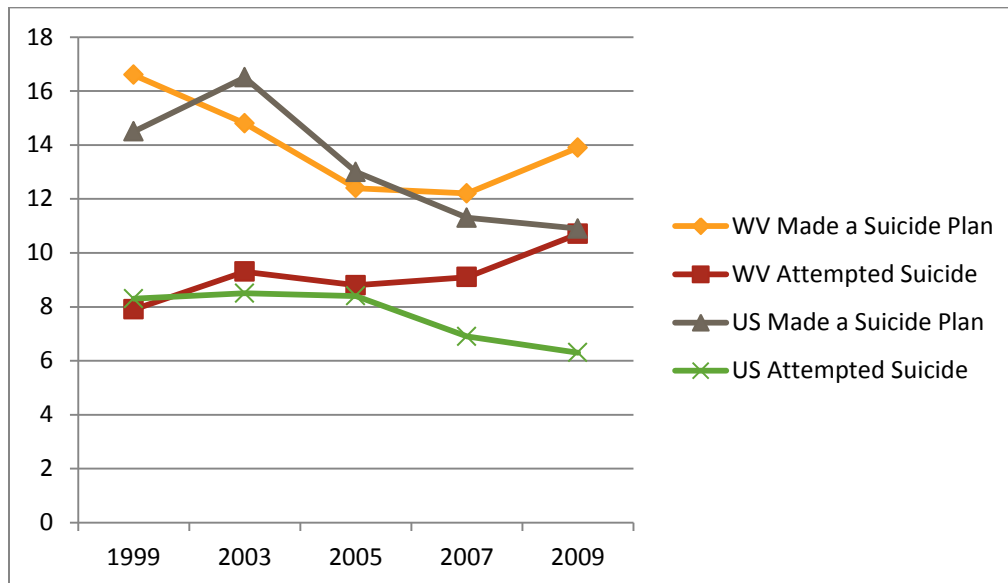
West Virginia	1993	1995	1997	1999	2003	2005	2007	2009
<b>Total</b>	26.6%	25.6%	23.2%	19.0%	17.8%	16.9%	16.0%	18.0%
<b>Female</b>	34.2%	30.4%	28.5%	23.2%	24.0%	21.0%	19.8%	21.0%
<b>Male</b>	19.2%	20.9%	17.7%	15.1%	12.1%	12.7%	12.3%	15.0%
United States	1993	1995	1997	1999	2003	2005	2007	2009
<b>Total</b>	24.1%	24.1%	20.5%	19.3%	19.3%	16.9%	14.5%	13.8%
<b>Female</b>	29.6%	30.4%	27.1%	24.9%	21.3%	21.8%	18.7%	17.4%
<b>Male</b>	18.8%	18.3%	15.1%	13.7%	12.8%	12.0%	10.3%	10.5%
<b>WV:US</b>	<b>1.1</b>	<b>1.1</b>	<b>1.1</b>	<b>1.0</b>	<b>0.9</b>	<b>0.9</b>	<b>0.9</b>	<b>1.2</b>

\*Ratio of WV relative to US; A score above 1 means WV rates are above US rates; a score below means WV rates are below US rates.

Note: Estimates are based on a survey-weighted hierarchical Bayes estimation approach

**Data Source: YRBSS**

***Students Grades 9 through 12 who reported Making a Suicide Plan, Students Reporting Attempting Suicide in the 12 Months Prior to the Survey***

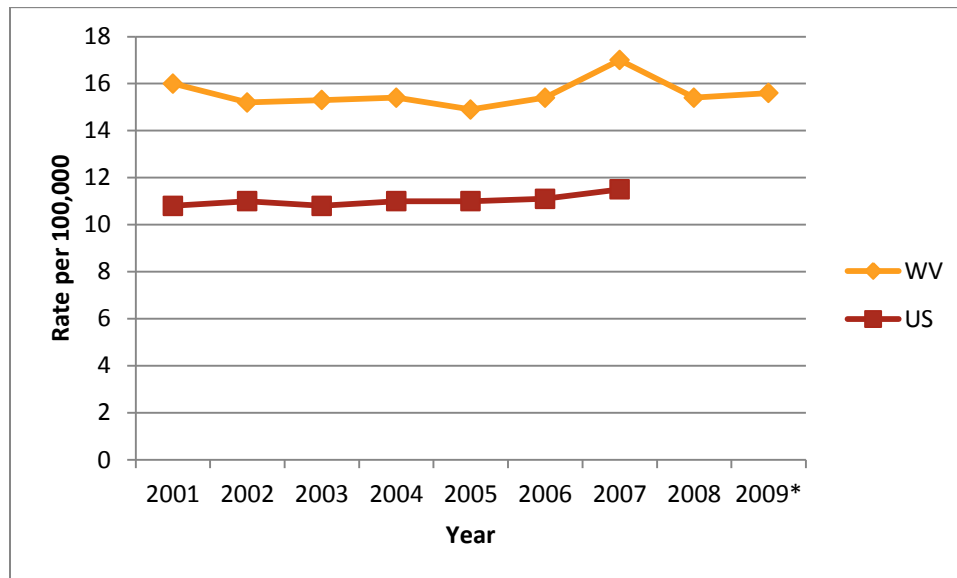


West Virginia	1999	2003	2005	2007	2009
Made a Suicide Plan	16.6%	14.8%	12.4%	12.2%	13.9%
Attempted Suicide	7.9%	9.3%	8.8%	9.1%	10.7%
United States	1999	2003	2005	2007	2009
Made a Suicide Plan	14.5%	16.5%	13.0%	11.3%	10.9%
Attempted Suicide	8.3%	8.5%	8.4%	6.9%	6.3%

Note: Estimates are based on a survey-weighted hierarchical Bayes estimation approach

Data Source: HSC

**Suicide Rate per 100,000**



West Virginia	2001	2002	2003	2004	2005	2006	2007	2008	2009
Suicides	290	277	278	281	272	282	312	284	288
Rate per 100,000	16.0	15.2	15.3	15.4	14.9	15.4	17.0	15.4	15.6
United States	2001	2002	2003	2004	2005	2006	2007	2008	2009
Suicides	30,622	31,655	31,484	32,439	32,637	33,300	34,598	N/A	N/A
Rate per 100,000	10.8	11.0	10.8	11.0	11.0	11.1	11.5	N/A	N/A
WV:US*	1.5	1.4	1.4	1.4	1.4	1.4	1.5		

\*Ratio of WV relative to US; a score above 1 means WV rates are above US rates; a score below 1 means WV rates are below US Rates  
N/A Data not available

## Homelessness

**Indicator Description:** Studies show that there are a high percentage of homeless people who struggle with substance abuse. Substance abuse often causes homelessness. Addictive disorders disrupt relationships and can often cause individuals to lose their jobs. For some people who are already struggling financially, this onset may cause them to lose their housing. A 2008 survey by the United States Conference of Mayors asked 25 cities their top three causes of homelessness. Substance abuse was the single largest cause of homelessness for single adults. Substance abuse sometimes is a result of homelessness rather than a cause; some homeless individuals often turn to drugs and alcohol to cope with their situations. Just as in any population, for many homeless people, substance abuse often co-occurs with mental illness. Research shows that people with untreated mental illnesses often use street drugs as a means of self-medication.

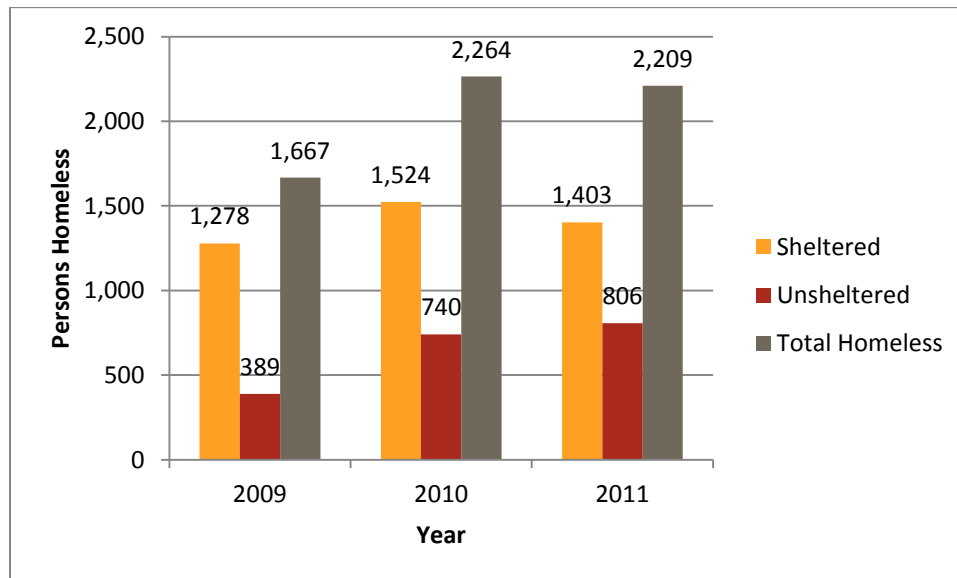
**Why Indicator is Important:** This indicator is important to show the relationship between homelessness and substance abuse. Prevention providers and homeless coalitions can target prevention programs to identify those at risk for homelessness, provide programs to prevent substance abuse, and offer services to those who may be affected by a mental illness.

**Key Highlights:**

- The homeless population in West Virginia has remained relatively stable since 2007.
- In 2010, approximately 12.5% of the sheltered homeless population in West Virginia reported using either using alcohol and/or drugs.
- In 2010, approximately 25.1% of the sheltered homeless population in West Virginia reported mental illness and substance use.
- Almost a quarter of the sheltered homeless who are veterans in West Virginia reported substance use.

**Data Source: WV Coalition to End Homelessness**

**Annual Point-in-Time of Persons Homeless in West Virginia**



*Note: The Point-in-Time count occurs every year and is a census of all homeless persons in West Virginia. Cities all across West Virginia and nationwide participate in similar counts and report the data to the Department of Housing and Urban Development (HUD).*

**2010 Balance of the State Sheltered Homeless**

	Number of Persons	Percentage
Homeless Use of Alcohol	96	4.5%
Homeless <u>Veterans</u> Using Alcohol	24	19.4%
Homeless Use of Illicit Drugs	79	3.7%
Homeless <u>Veterans</u> Using Drugs	6	4.8%
Homeless Use of Alcohol and Drugs	93	4.3%
Homeless Mental Health Problem	272	12.6%

## Domestic Violence

**Indicator Description:** Research by SAMSHA reveals domestic violence frequently indicates high rates of alcohol and other drug use by perpetrators during abuse. SAMSHA also reports that not only do perpetrators tend to abuse drugs and alcohol more frequently, but domestic violence increases the probability that survivors of domestic violence will use alcohol and drugs to cope with the abuse. The following section describes the scope of domestic violence in West Virginia and how it correlates to substance use and mental health.

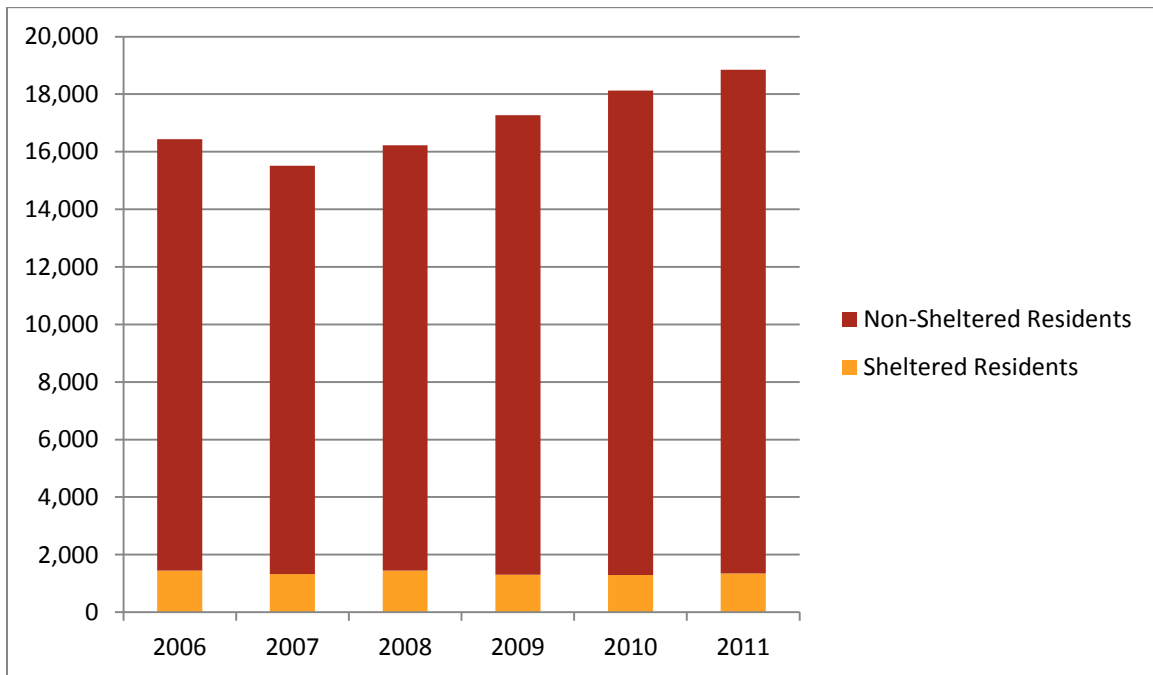
**Why Indicator is Important:** This indicator is important to show the relationship between domestic abuse and substance abuse. Prevention providers and domestic abuse programs can provide programs to prevent substance abuse to survivors, and offer services to those who may be affected by a mental illness.

**Key Highlights:**

- In 2011, over 32% of survivors identified that substance abuse was a contributing factor to their abuse.
- In 2011, approximately 93% of individuals who received services through the West Virginia Coalition Against Domestic Violence were receiving non-sheltered services.

**Data Source: WVCADV**

***Individuals Served through the West Virginia Coalition Against Domestic Violence***

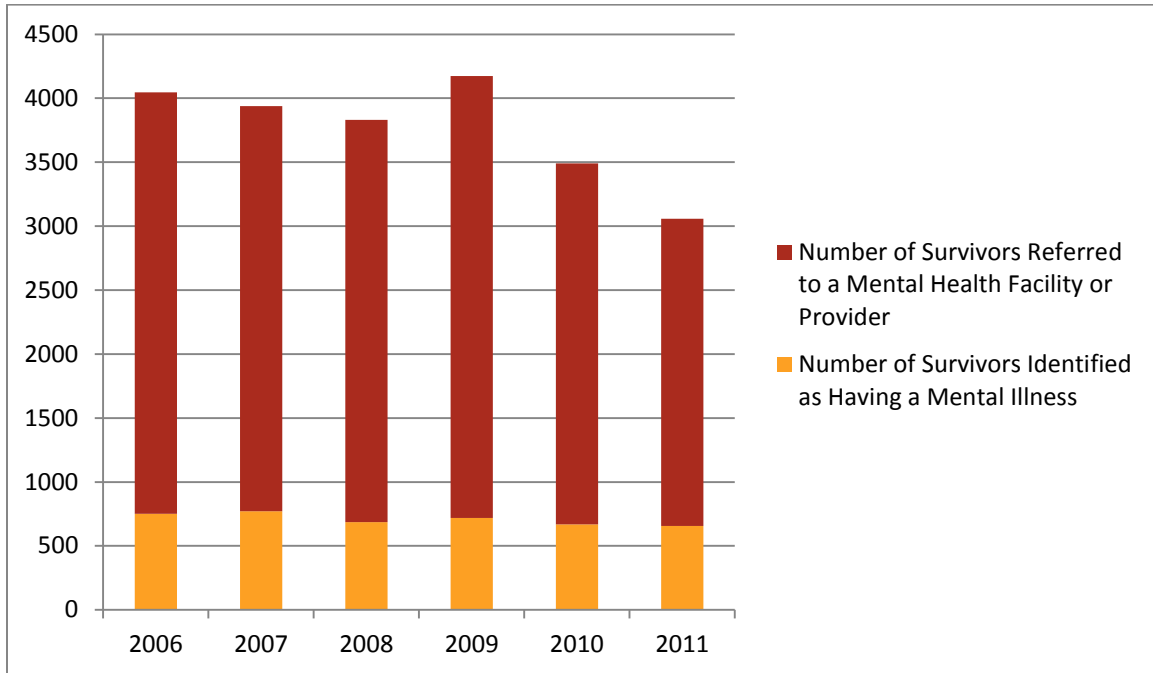


	2006	2007	2008	2009	2010	2011
<b>Sheltered Residents</b>	1,453	1,322	1,452	1,300	1,294	1,350
<b>Non-Sheltered Residents</b>	14,979	14,192	14,778	15,973	16,830	17,502

***Age of Survivors Served***

	2006	2007	2008	2009	2010	2011
<b>Not Stated</b>	3,857	3,459	3,692	3,807	3,873	4,734
<b>1-12</b>	880	961	1,051	1,197	1,484	1,651
<b>13-17</b>	607	501	528	479	526	587
<b>18-29</b>	2,474	2,603	2,977	3,370	3,888	3,798
<b>30-39</b>	3,449	3,314	3,323	3,684	3,632	3,609
<b>40-49</b>	2,815	2,517	2,445	2,517	2,514	2,425
<b>50-59</b>	1,499	1,360	1,305	1,365	1,364	1,368
<b>60+</b>	845	723	683	692	691	728

### ***Behavioral Health Status of Survivors***



	2006	2007	2008	2009	2010	2011
<b>Number of Survivors Identified as Having a Mental Illness</b>	751	771	687	718	669	657
<b>Percent</b>	4.1%	4.4%	3.8%	3.7%	3.3%	3.5%
<b>Number of Survivors Referred to a Mental Health Facility or Provider</b>	3,294	3,167	3,144	3,456	2,821	2,400
<b>Percent</b>	17.9%	18.1%	17.2%	17.9%	14.0%	12.7%

### ***Veteran Status of Survivors Served***

	2006	2007	2008	2009	2010
<b>Veteran</b>	30	31	38	35	32
<b>Enlisted</b>	7	3	5	3	11
<b>Other</b>	1	3	1	3	5

***Total Hours of Services Provided***

	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>Crisis Counseling</b>	6,098	4,485	6,381	6,085	6,095	7,690
<b>Follow-up</b>	8,703	12,114	10,771	11,602	11,049	11,468
<b>Therapy</b>	2,166	17,21	1,789	1,516	1,651	2,038
<b>Hotline Counseling</b>	3,046	3,418	3,458	2,903	3,165	3,630
<b>Information &amp; Referral</b>	3,274	3,433	4,376	4,441	4,251	4,340
<b>Criminal Justice Advocacy</b>	1,701	1,657	1,778	1,692	1,255	1,319
<b>Financial Assistance</b>	137	171	223	97	338	136
<b>Legal Advocacy</b>	7,467	5,439	6,308	5,465	5,028	1901
<b>Victim Compensation</b>	16	76	61	36	1,016	1,395
<b>Personal Advocacy</b>	10,733	10,181	12,989	13,446	11,346	8,947
<b>Case Management</b>	33,511	21,943	24,893	24,984	24,843	14,019
<b>Visitation/Exchange</b>	8,006	5,157	6,597	4,720	6,423	8,585
<b>Safety Planning</b>	374	816	1,547	1,419	1,508	1,985
<b>Civil Legal Advocacy</b>	1,631	3,486	4,024	6,234	7,687	9,821
<b>Medical Advocacy</b>	221	232	347	271	358	301

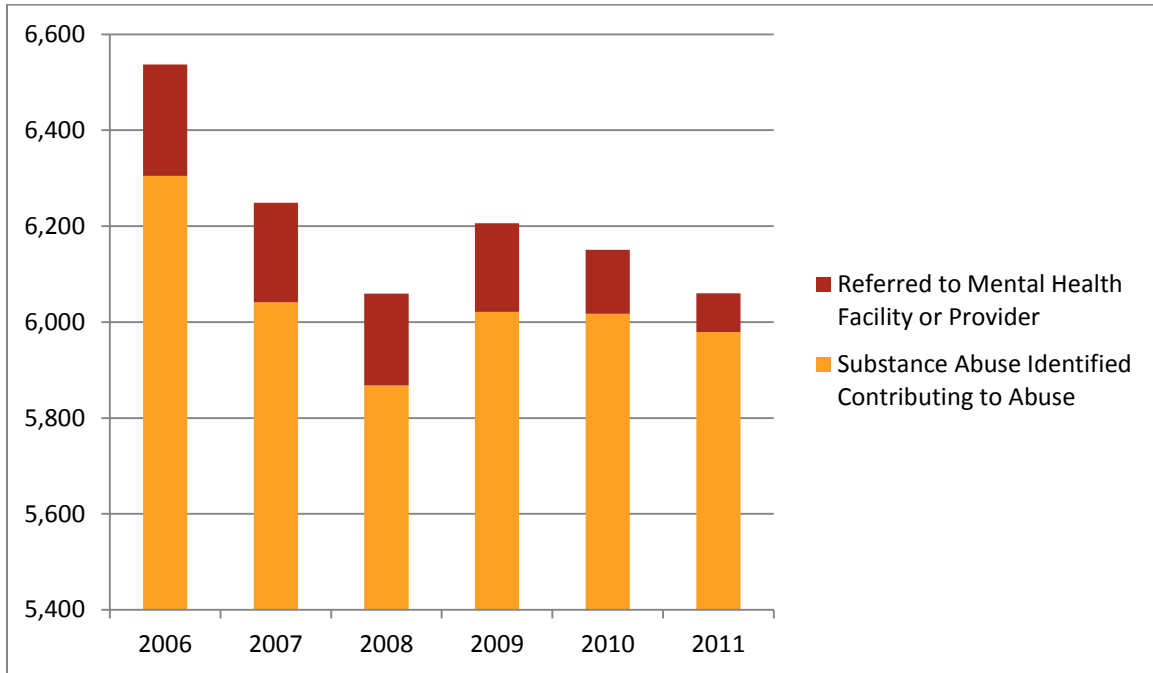
***Age of Abusers***

<b>STATEWIDE</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>Not Stated</b>	5,005	4,726	4,954	4,713	4,820	5,357
<b>1-12</b>	24	9	19	13	12	18
<b>13-17</b>	150	126	127	140	181	194
<b>18-29</b>	3,942	3,732	3,759	4,148	4,251	4,139
<b>30-39</b>	3,859	3,776	4,007	4,003	4,415	3,988
<b>40-49</b>	2,749	2,624	2,469	2,745	1,798	2,740
<b>50-59</b>	1,219	1,256	1,265	1,189	1,350	1,329
<b>60+</b>	481	480	437	475	537	579

***Veteran Status of Abusers***

<b>STATEWIDE</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>Veteran</b>	241	232	208	216	280	210
<b>Enlisted</b>	46	34	35	38	40	32
<b>Other</b>	20	28	36	45	47	4

### Behavioral Health Status of Abusers



	2006	2007	2008	2009	2010	2011
<b>Substance Abuse Identified Contributing to Abuse</b>	6,305	6,041	5,868	6,021	6,017	5,979
<b>Percent</b>	34.2%	34.5%	32.2%	31.2%	29.9%	32.6%
<b>Referred to Mental Health Facility or Provider</b>	232	208	191	185	134	81
<b>Percent</b>	11.6%	10.4%	9.5%	9.2%	6.7%	0.4%

## Data Sources

### *Data Source: The Behavioral Risk Factor Surveillance System (BRFSS)*

*Description: The BRFSS is a cross-sectional telephone survey conducted by the West Virginia Bureau for Public Health's Health Statistic Center with technical and methodological assistance provided by the Centers for Disease Control and Prevention (CDC). Every year, more than 4000 West Virginians are randomly selected to conduct a telephone survey using a standardized questionnaire to determine the distribution of risk behaviors and health practices. This random selection is to reflect the population of West Virginia. This survey is conducted by West Virginia; information is then forwarded to CDC, where the monthly data are collected for each state.*

*Sponsored by: CDC and the West Virginia Health Statistics Center (HSC)*

*Geographic level: National, State*

*Frequency: Data collected and reported annually*

#### *Strengths:*

- *Standardized and comparable across states*
- *Trend data available since 1984*
- *Starting in 2009, a smaller cell phone sample is conducted since the majority of younger adults may not have land lines*

#### *Limitations:*

- *Average response rate was low*
- *Only civilian, non-institutionalized persons are eligible for the survey*
- *Self-report/response bias*

*Link to source: [www.cdc.gov/brfss](http://www.cdc.gov/brfss)*

**Data Source: The Fatality Analysis Reporting System (FARS)**

*Description: A nationwide census providing data regarding fatal injuries suffered in motor vehicle traffic crashes. The data is to assist the traffic safety community in identifying traffic safety problems, developing and implementing vehicle and driver countermeasures, and evaluation of motor vehicle safety standards and highway safety initiatives. FARS contains census data of all fatal traffic crashes in West Virginia and all 50 states, the District of Columbia, and Puerto Rico.*

*Sponsored by: National Center for Statistics and Analysis (NCSA), National Highway Traffic Safety Administration (NHTSA), US Department of Transportation (DOT)*

*Geographic level: National, State*

*Frequency: Data collected within 30 days of crash*

**Strengths:**

- *Standardized and comparable across states*
- *Trend data available since 1990*

**Limitations:**

- *Includes fatalities only, not all crashes from impaired driving*

*Link to source: [www.nhtsa.gov/FARS](http://www.nhtsa.gov/FARS)*

*Data Source: **CDC Wonder Compressed Mortality Data***

*Description: The Compressed Mortality database contains mortality population counts for the United States. Counts and rates of death can be obtained by underlying cause of death, state, county, age, race, sex, and year.*

*Sponsored by: CDC*

*Geographic Level: National, State*

*Frequency: Data collected and reported annually*

*Strengths:*

- *Standardized and comparable across states*
- *Uses the International Classification of Diseases(ICD) for consistency*
- *Trend data available since 1979*

*Limitations:*

- *ICD-10 codes differ from ICD- 9 codes*

*Link to Source: [wonder.cdc.gov](https://wonder.cdc.gov)*

*Data Source: **West Virginia Health Statistics Center (HSC)***

*Description: Mortality information for residents of West Virginia. Mortality information is collected from death certificates and includes personal identifiers, demographic characteristics of the deceased, cause and manner of death, and other information regarding the death.*

*Sponsored by: West Virginia Health Statistics Center, Vital Statistics*

*Geographic Level: State, County with the ability to for sub-county breaks in recent years*

*Frequency: Collected and reported annually*

*Strengths:*

- *Collected consistently by the state*
- *Complete data sets*

*Limitations:*

- *Data on West Virginia residents where the death occurs in other states is not comparable*
- *Time lag in autopsy results*
- *Information regarding some deaths in which drugs played a contributory role may be obscured by the actual cause of death*

*Link to Source: [www.wvdhhr.org/bph/hsc/vital](http://www.wvdhhr.org/bph/hsc/vital)*

*Data Source: **The National Survey on Drug Use and Health (NSDUH)***

*Description: The NSDUH is a survey that serves as the primary source of information on the prevalence and incidence of illicit drug, alcohol, and tobacco uses in the civilian non-institutionalized population aged 12 and older in West Virginia and all 50 states. The survey is conducted using a Telephone computer-assisted interviewing methodology.*

*Sponsored by: Substance Abuse and Mental Health Services Administration*

*Geographic level: National, State*

*Frequency: Biannually*

*Strengths:*

- *Trend data is available*
- *Standardized data collection nationwide*

*Limitations:*

- *No demographic breakdown of data available*

*Link to Source: [nsduhweb.rti.org](https://www.nsdweb.rti.org)*

*Data Source: **Pregnancy Risk Assessment Monitoring System (PRAMS)***

*Description: PRAMS is a surveillance project of the CDC and West Virginia Bureau for Public Health. PRAMS collects state specific data on maternal attitudes and experiences before, during, and shortly after pregnancy.*

*Sponsored by: CDC and West Virginia Bureau for Public Health*

*Geographic Level: National, State*

*Frequency: Annual*

*Strengths:*

- *Standardized data collection*
- *Trend data is available since 2000*
- *Comparable across states*

*Limitations:*

- *Not all questions asked are comparable across states*
- *Self-report/response bias*

*Link to Source: [www.cdc.gov/PRAMS/index.htm](http://www.cdc.gov/PRAMS/index.htm)*

**Data Source: *The Youth Risk Behavior Surveillance System (YRBSS)***

*Description: The YRBSS is a national survey administered to monitor six types of health-risk behaviors that contribute to the leading causes of death and disability among youth and adults including: tobacco use, alcohol and other drug use, unhealthy dietary behaviors, physical activity, sexual risk behaviors, and behaviors that contribute to unintentional injuries and violence. The YRBSS includes a national school-based survey conducted by the CDC that is administered to students in grades 9 through 12. The survey collects information on youth risk behaviors.*

*Sponsored by: CDC*

*Frequency: Bi-Annually*

**Strengths:**

- *Trend data since 1991*
- *Standardized Survey across states*

**Limitations:**

- *Self-Report/response-bias*
- *County level data is not available*

**Link to Source:** [www.cdc.gov/healthyyouth/yrbs/index.htm](http://www.cdc.gov/healthyyouth/yrbs/index.htm)

**Data Source: *West Virginia Youth Tobacco Survey (YTS)***

*Data Description: The YTS is an evaluation tool for West Virginia's state tobacco prevention program. The YTS is a school based survey that collects data from young people in grades 6 through 12. The data provides information on many key intermediate and long-term tobacco related indicators.*

*Sponsored by: The West Virginia Division of Tobacco Prevention and the West Virginia Department of Education and the CDC*

*Geographic Level: State*

*Frequency: Biannually*

**Strengths:**

- *Tailored questionnaire to state's unique tobacco control program*
- *Trend data available*
- *Data that measure components of CDC's best practices for tobacco control programs*

**Limitations:**

- *Only public middle schools and high school students (grades 6-12) are eligible to participate*
- *Self-report/response-bias*

**Link to Source:** [www.cdc.gov/tobacco/data\\_statistics/surveys/yts](http://www.cdc.gov/tobacco/data_statistics/surveys/yts)

*Data Source: **Healthcare Cost & Utilization Project (HCUP)net***

*Data Description: The HCUPnet is an online tool for identifying, tracking, and analyzing national and regional hospital statistics. West Virginia statistics from HCUP Inpatient Database is collected by the West Virginia Health Care Authority. The state inpatient database encompasses 95% of US community hospital discharges.*

*Sponsored by: Agency for Healthcare Research and Quality (AHRQ)*

*Geographic Level: State*

*Frequency: Annual*

*Strengths:*

- *Includes data on all inpatient discharges from non-federal hospitals in West Virginia*
- *Trend data available since 1990*

*Limitations:*

- *Data is used for administrative purposes rather than epidemiological analyses*

*Link to Source: [www.hcawv.org/DataAndPublic/data.htm](http://www.hcawv.org/DataAndPublic/data.htm)*

*Data Source: **West Virginia Traffic Accident Database***

*Data Description: The Governor's Highway Safety Program collects data from the West Virginia Traffic Accident database and the West Virginia Traffic Engineering Division of the Division of Highways. Data from the Governor's Highway Safety Program is used to plan traffic crash intervention programs. In addition, these program target resources to police agencies to conduct various enforcement campaigns. The West Virginia Traffic Accident Database collects data from police officers who investigate traffic crashes through the state mandated traffic accident form which provides the state with data relating to all traffic crashes occurring on the state highway system.*

*Sponsored By: The West Virginia Traffic Engineering Division of the Division of Highways*

*Geographic Level: State*

*Frequency: Annual, partial year data available upon request*

*Strengths:*

- *Real-time data*
- *Trend data available since 2000*

*Limitations:*

- *The ability to query data*

*Data Source: **West Virginia Coalition to End Homelessness***

*Data Description: The West Virginia Coalition to End Homelessness maintains a database on sheltered homelessness including; disability, substance abuse, and severe mental illnesses. This database also contains information on bed availability, number of beds occupied, type of beds occupied, and those under development in 44 counties of West Virginia.*

*Sponsored By: The West Virginia Coalition to End Homelessness*

*Geographic Level: State, County*

*Frequency: Live database*

*Strengths:*

- *Real-time data*
- *Collects unique data on a sensitive population that is at high risk for substance abuse and mental illness*

*Limitations:*

- *Does not contain the number of individuals turned away due to substance abuse or mental illness*

*Data Source: **West Virginia Synar Program***

*Data Description: Under the Alcohol, Drug Abuse, and Mental Health Administration Reorganization Act (P.L. 102-321), which includes the Synar Amendment (section 1926), states are required to enact and enforce laws prohibiting the sale or distribution of tobacco products to individuals under 18 years of age. In order to comply with this legislation, West Virginia conducts annual, random, unannounced inspections of retail tobacco outlets and reports the findings to the U.S. Department of Health and Human Services (DHHS).*

*Sponsored By: Substance Abuse and Mental Health Administration (SAMSHA) and the Bureau for Behavioral Health and Health Facilities (BBHFF)*

*Geographic Level: State*

*Frequency: Annual*

*Strengths:*

- *Trend data available since 1997*
- *Measures progress in reducing youth access to tobacco*
- *Compliance checks are conducted uniformly from county to county*

*Limitations:*

- *Data is unable to track repeat retail violations across the state.*

**Data Source: *Alcohol-Related Disease Impact (ARDI)***

*Data Description: ARDI is an online application that provides national and state estimates of alcohol-related health impacts, including years of potential life lost (YPLL). These estimates are calculated for 54 acute and chronic causes using alcohol-attributable fractions, and are reported by age and sex. In order to estimate alcohol-related deaths due to alcohol consumption ARDI either calculates or uses pre-determined estimates of Alcohol-Attributable Fractions (AAFs); the proportions of deaths caused by a specific condition to obtain the number of alcohol attributable deaths.*

*Sponsored By: CDC*

*Geographic Level: National, State*

*Frequency: 2001-2005 average*

***Strengths:***

- *Provides alcohol-attributable mortality estimates for a number of diseases*
- *West Virginia specific alcohol related deaths are available by gender and age groups*

***Limitations:***

- *Based on self-report data from BRFSS data*
- *BRFSS prevalence estimates are based on alcohol use during the past 30 days; former drinkers are not included in the calculations*

**Link to Source:** [apps.nccd.cdc.gov/DACH\\_ARDI/default/Default.aspx](https://apps.nccd.cdc.gov/DACH_ARDI/default/Default.aspx)

*Data Source: **State Health Facts***

*Description: Statehealthfacts.org is a project of the Henry J. Kaiser Family Foundation and is designed to provide easy to use health facts for all 50 states. Statehealthfacts.org provides data on more than 700 health topics and is linked to both the Kaiser Family Foundation and the Kaiser Health News.*

*Sponsored by: Kaiser Family Foundation*

*Frequency: Varies between health topics*

*Strengths:*

- *Provides easy to use data for all 50 states that is comparable*

*Limitations:*

- *Provides only the most up-to-date data available; trend data is not available*

*Link to Source: [www.kff.org](http://www.kff.org)*

*Data Source: **National Institute on Alcohol Abuse and Alcoholism (NIAAA)***

*Description: The NIAAA collects data on volume beverage and ethanol consumption in gallons for states as well as per capita ethanol consumption. Data are presented for beer, wine, spirits, and all three combined.*

*Sponsored By: National Institutes of Health (NIH)*

*Frequency: Data are collected and reported annually*

*Strengths:*

- *Trend data available since 1990*
- *Collected consistently*

*Limitations:*

- *Lag-time in data reporting*
- *Data unavailable by county level*

*Link to Source:*

[www.niaaa.nih.gov/Resources/DatabaseResources/QuickFacts/AlcoholSales/default.htm](http://www.niaaa.nih.gov/Resources/DatabaseResources/QuickFacts/AlcoholSales/default.htm)

*Data Source: **West Virginia Poison Center Database (WV Poison Center)***

*Data Description: The West Virginia Poison Center collects data from calls that come into the Poison center. The database collects exposure data, drug identification, overdose trends, and emerging drug abuse.*

*Sponsored by: West Virginia Poison Center*

*Geographic Level: State, Local*

*Frequency: Real-time data available.*

*Strengths:*

- *Trend data available since 2000*
- *National and State monitoring*
- *Exposure information and information calls are collected*
- *Common definition for data field that have been well established and consistent with accuracy ensured via daily quality assurance activities*
- *Reports are from callers via telephone; and may be more likely to be thought as being confidential*

*Limitations:*

- *Not all poisoning exposures are reported*
- *Some events are less likely to initiate poison center contact; for example a substance abuse death*
- *Only coded data search, no text fields*
- *It is not bedside patient evaluation; the data is only as good or accurate as what is provided.*

*Data Source: **West Virginia Incident-Based Reporting System (WV-IBRS)***

*Data Description: WV-IBRS is the modernized version of the Uniform Crime (UCR) Program utilized by law enforcement. Details about every single crime occurrence are recorded in WV-IBRS as opposed to the summary counts available through the UCR.*

*Sponsored By: WV State Police*

*Geographic Level: State, County*

*Frequency: Annual*

*Strengths:*

- *Collects data on every single crime incident and arrest within 22 crime categories including: DUI, drug/narcotic violations, and drug equipment violations*
- *Entire state is represented*
- *Dynamic data set where information can be continuously updated within a fairly wide time window.*

*Limitations:*

- *Four month lag time in reporting data*
- *Reporting can be inconsistent over time across agencies*
- *Missing data is not accounted for in the state system*

*Data Source: **West Virginia Prescription Drug Abuse Quitline (WVPDAQ)***

*Data Description: WVPDAQ was developed to specifically assist individuals determine their prescription drug quitting needs. Phone educators are highly training in crisis and addictions. The WVPDAQ is an online database that contains all the qualitative and quantitative information collected by the WVPDAQ educators. When an individual calls into the Quitline, a WVPDAQ survey is collected in order to help serve the caller and provide trends.*

*Sponsored By: The West Virginia Education Fund*

*Geographic Level: State, Region*

*Frequency: Data is collected on a caller-by-caller basis. An intake survey is conducted during the initial phone call to WVPDAQ. After the initial call, three follow up surveys are scheduled. Since opening in 2008, WVPDAQ has served over 1,500 callers.*

*Strengths:*

- *Survey design was based on peer-reviewed, published research on the quality and effectiveness of public health intervention hotlines.*
- *Data provides unique insight into prescription drug abuse that no other survey provides.*

*Limitations:*

- *Based on self-report, report bias*
- *The surveys were voluntary; therefore county data was not available because of insufficient data collection on county of residence.*

*Data Source: **West Virginia Coalition Against Domestic Violence (WVCADV)***

*Data Description: WVCADV is a uniform database that all 14 licensed domestic violence programs in West Virginia use. The WVCADV database provides detailed data surrounding all aspects of services provided by licensed domestic violence programs across the state and captures a profile of the servicers (survivors/abusers). Data collected is used in developing public policy talking points, is a base for public awareness messaging, and guides the coalition in addressing unmet needs and gaps in services.*

*Sponsored By: West Virginia Coalition Against Domestic Violence*

*Geographic Level: State, County*

*Frequency: Aggregate data is submitted to the coalition on a monthly basis*

*Strengths:*

- *Database is uniform across all 14 licensed programs.*
- *Consistent field definitions based on federal grant definitions.*
- *User friendly and can be adapted through the creation of queries and reports for specific needs.*

*Limitations:*

- *Data is limited as what is captured is only what the survivor is willing to share.*
- *Substance abuse information is not collected on survivors.*
- *Local program staff turnover may reduce the uniformity in reporting practices and definitions because of their lack of training.*

**Data Source: West Virginia Centralized Juvenile Probation Data System (WVJDS)**

*Data Description: The Centralized Juvenile Probation Data System is used by WV juvenile probation offices to provide statistical information on the juvenile offenders and offenses in an effort to facilitate sound policy and case-level decision, fair resource allocation and appropriate program development.*

*Sponsored By: West Virginia Supreme Court of Appeals Division of Probation Services*

*Geographic Level: State, County*

*Frequency: Annually*

*Strengths:*

- *State and county level data is consistent and uniform across the state to capture key information on juvenile offenses.*

*Limitations:*

- *Data is limited to what information is provided by WV juvenile probation. Juvenile probation cases not put into the web-based system are not included.*

**Data Source: The Treatment Episode Data Set (TEDS)**

*Description: TEDS is a compilation of data on the demographic and substance abuse characteristics of admissions to substance abuse treatment. TEDS data is routinely collected by State administrative systems and submitted to SAMHSA in a standard format. TEDS data includes almost 2 million admissions reported by over 10,000 facilities to the 50 States, District of Columbia, and Puerto Rico over the 12 month period of a calendar year.*

*Sponsored by: Office of Applied Studies, Substance Abuse and Mental Health Services Administration (SAMHSA)*

*Geographic level: National, State*

*Frequency: Annually*

**Strengths:**

- *Standardized and comparable across states*
- *Trend data available since 1992.*

**Limitations:**

- *Counts are by admissions, not by individuals; meaning an individual admitted multiple times during the year is counted every time they are admitted.*
- *Only the primary admission substance is counted.*
- *Time lag in reporting among some states.*
- *Does not capture data on facilities operated by Federal agencies (Bureau of Prisons, Department of Defense, and the Veterans Administration)*

*Link to source: [www.dasis.samhsa.gov/webt/information.htm](http://www.dasis.samhsa.gov/webt/information.htm)*

*Data Source: **West Virginia Office of Epidemiology and Prevention Services (OEPS)***

*Data Description: The Office of Epidemiology and Prevention Services is part of the West Virginia Bureau for Public Health, and consists of eight divisions which collect various surveillance data including: Infectious Disease Epidemiology, Immunization Services, Informatics, Hemophilia, Cancer Epidemiology, STD, HIV& Hepatitis and Tuberculosis.*

- *The West Virginia Electronic Disease Surveillance System (WVEDSS) is a web-based electronic reporting system. This system supports the surveillance of most infectious diseases including hepatitis B and C.*
- *The STD Management Information System (STD-MIS) is a CDC provided electronic surveillance system which supports the surveillance of certain bacterial STDs including HIV and AIDS.*

*Sponsored By: West Virginia Bureau for Public Health*

*Geographic Level: State, County*

*Frequency: Live databases*

*Strengths:*

- *Reporting of infectious diseases by the health care providers and facilities is required by WV Code 16-3-1; 64CSR7.*
- *Consistent statewide surveillance systems*
- *Trend data available*

*Limitations:*

- *Behavioral risk factors are rarely reported on hepatitis surveillance forms; therefore it cannot be determined which Hepatitis C cases were as a result of intravenous drug users.*
- *Because of passive surveillance, cases of hepatitis C are not recognized or reported. Thus, underestimating the burden of disease and related risk factors.*

## Data Glossary

**Count**-is a total that is reached by adding something up (e.g. number of students who smoke).

A count is often referred to as raw numbers that are collected and reported by various agencies. In the profile, whenever possible, raw numbers are provided with percentages.

**Incidence Rate**- is a measure of frequency with which an event occurs in a defined population in a defined time (e.g., number of deaths per one hundred thousand in one year). The components of the rate are the raw number (numerator) and the population (denominator).

**Morbidity**-is the presence of disease that occurs at a specific time, in a specific group, or from a particular cause.

**Mortality**-is the number of deaths that occur at a specific time, in a specific group, or from a particular cause.

**Percent**-is a way of expressing a number as a fraction of 100. It is often denoted using the percent sign % (e.g. 27% of West Virginians smoke).

**Prevalence**-is the total number of cases of the risk factor in the population at a given time.

**Ratio**-is the value obtained by dividing one quantity by another. A ratio often compares two rates, for example comparing death rates in West Virginia to death rates in the United States. Rate ratios are used in this profile. A rate ratio of 1.0 indicates that the West Virginia rate equals the United States rate. Over 1.0 indicates higher use, while less than 1.0 indicates lower use.

## Acronym Glossary

Title	Acronym
Alcohol-Related Disease Impact	ARDI
Behavioral Risk Factor Surveillance System	BRFSS
Bureau for Behavioral Health and Health Facilities	BBHBF
CDC Wonder Compressed Mortality Data	CDC Wonder
Centers for Disease Control and Prevention	CDC
Fatality Analysis Reporting System	FARS
Healthcare Cost & Utilization Project	HCUP
National Institute on Alcohol Abuse and Alcoholism	NIAAA
Pregnancy Risk Assessment Monitoring System	PRAMS
State Epidemiological Outcomes Workgroup	SEOW
Substance Abuse and Mental Health Services Administration	SAMHSA
The National Survey on Drug Use and Health	NSDUH
West Virginia Coalition Against Domestic Violence	WVCADV
West Virginia Health Statistics Center	HSC
West Virginia Incident-Based Reporting System	WVIBRS
West Virginia Poison Center Database	WV Poison Center
West Virginia Prescription Drug Abuse Quitline	WVPDAQ
West Virginia Youth Tobacco Survey	YTS
Youth Risk Behavioral Surveillance System	YRBSS